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THE CANADIAN AUTOMOTIVE INDUSTRY AND THE 1965 CANADA - UNITED STATES AUTOMOTIVE PRODUCTS TARIFF AGREEMENT

by

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A THESIS

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The undersigned certify that they have read, and recommend to the Faculty of Graduate Studies for acceptance, a thesis entitled THE CANADIAN AUTOMOTIVE INDUSTRY AND THE 1965 CANADA - UNITED STATES AUTOMOTIVE PRODUCTS TARIFF AGREEMENT submitted by Keith J. Brewer in partial fulfilment of the requirements for the degree of Master of Arts.

PREFACE

The higher costs in the Canadian automotive industry, in comparison with the costs in the U.S. automotive industry, mean that the Canadian industry could not survive in direct competition with the U.S. industry. The integrated nature of the operations of these industries, however, provides the basis for their rationalization into a combined North American industry. This is to be achieved by means of the Automotive Products Tariff Agreement contracted between Canada and the U.S. in 1965. The purpose of the Agreement is to enable both countries to benefit through reduced costs and more efficient production. The thesis examines the terms of the Agreement and points out the factors which will have a bearing on its future success.

It is not possible to examine closely the affairs of individual companies since, for the most part, the necessary data is not published. Accordingly, the data used in the thesis is obtained from public documents, trade associations, and individuals connected with the industry.

In the preparation of this thesis I owe a debt of gratitude to Dr. S.E. Drugge and Dr. R. Pendergast, of the Economics Department, University of Alberta, for their continued guidance and suggestions. Thanks are also due to the Motor Vehicle Manufacturers' Association and the Automotive Parts Manufacturers' Association, both of Toronto, the Automotive Industries Association and the Department of Industry, in Ottawa, and Prairie Pacific Distributors, Ltd., of Edmonton, for

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PART I

THE AUTOMOTIVE INDUSTRY AND THE TERMS OF THE 1965 TARIFF AGREEMENT

CHAPTER I

INTRODUCTION

This thesis has as its subject the Automotive Products Tariff Agreement of 1965 and the effects of this Agreement on the Canadian Automotive Industry. The Agreement is between the Governments of Canada and the U.S. and affects that part of secondary manufacturing industry devoted to automotive products.

The automotive industry in Canada consists of the Canadian Motor Vehicle Manufacturing Industry and the Canadian Motor Vehicle Parts and Accessories Industry, but overall automotive operations in Canada involve nearly one seventh of the Canadian labour force.[1] In view of the relatively large size, its operations are of great importance to the national economy.

The Agreement embodies the plans of the Canadian Government and some firms to increase the efficiency of the industry by a method of conditional tariff removal, and evidences a changing government attitude towards protection of the industry. In the past, Canadian tariff structure has been based upon conflicting considerations: a tariff high enough to protect the developing manufacturing industry, but low enough to promote international trade.[2]

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[1] R.F.Bennett, Report on Business Outlook, 1966: Motor Vehicles (University of Toronto, School of Business, 1966), pp.33-37.

[2] H.C.Eastman, "Some Aspects of Tariff Protection in Canada," International Journal, XVIII (Summer, 1963), 363-360.

Canada's most recent attitude towards protectionism is exemplified by her opposition to the U.K. joining the European Economic Community, and the refusal to co-operate with the U.S. when that country passed the Trade Expansion Act in 1962. This Act empowered the President of the U.S. to reduce tariffs in negotiations with the E.E.C. on those commodities in which the U.S. and the E.E.C. together accounted for more than 80 per cent of world trade. Inclusion of Canada in this arrangement would hopefully have led to an expansion of foreign markets for Canadian products, but would have been accompanied by a reduction in the Canadian tariff - something which is generally feared by Canadian manufacturers.

The historic reason for protectionism of secondary manufacturing industry in Canada has been the higher costs in production, which made the tariff necessary for the survival of Canadian industry in the face of foreign competition. Thus Canadian industry has developed behind the protective tariff and firms have become established in Canada to take advantage of this protection.

The thesis concerns a unique approach to partial free trade in automotive products afforded by the terms of the 1965 Agreement, and the problems associated with the development of the Canadian industry in a rationalized North American automotive industry. The automotive industry is a natural choice to begin rationalizing production facilities and liberalizing trade on a sectoral basis, since the major producers in Canada are subsidiaries of U.S. firms and produce almost identical products.

In its attitude with respect to the Automotive Agreement the Canadian Government believes that the Canadian automotive industry has developed past the stage of an infant industry and, under the safeguards built into the Agreement, would be able to expand production enough to achieve lower unit costs more comparable to the unit costs that exist in the U.S. industry.

Although the Automotive Agreement has been called a free trade arrangement, it does not allow free trade in the normal sense. The Agreement is in two parts: the first part between the Governments of Canada and the U.S., and the second part between the Canadian Government and some Canadian automobile manufacturers, who are eligible to import some automotive products duty-free provided certain other conditions of production are satisfied. The Agreement is also limited to finished vehicles and original equipment automotive parts which will be allowed to flow freely between eligible firms in Canada and the U.S. The scheme does not compare with multilateral or bilateral approaches to trade liberalization between the two countries.[3] The concession of free trade in automotive products certainly does not apply to the Canadian who is not one of the eligible motor vehicle manufacturers.

Traditional studies of free trade pacts discuss welfare aspects,[4] but this approach is outside the intended scope of the thesis. In view

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[3]Sperry Lea, A Canadian - U.S. Free Trade Arrangement, Canadian Trade Committee Series (Montreal: Private Planning Association of Canada, 1963), p. 20.

[4]See for instance, R. G. Lipsey, "The Theory of Customs Unions: A General Survey," Economic Journal, LXX (Summer, 1960), 496-513.

of the fact that the Agreement was enacted with the objects of improving the automotive trade deficit and stimulating production and employment in the industry, this thesis will be concerned with production, employment, productivity, and trade patterns. Generalizations about the increased trade and production resulting from the Agreement are difficult to base on a broad theoretical outline, and the actual production and employment structures prior to the Agreement have to be examined in some detail if predictions for the future are to be made. Moreover, any changes which take place after the Agreement becomes effective may or may not be the result of the tariff change. Changing policies adopted by the firms constituting the industry may be just as effective.

One of the historical objectives of tariff protection in Canada was to limit the influence of the U.S. on the operations of the Canadian economy. The future industry rationalization resulting from the Agreement means that U.S. foreign policy, on the part of the U.S. Government as well as the parent firms of Canadian subsidiaries, will become more influential in Canada. At the same time as the similar nature of the automotive industries in Canada and the U.S. makes possible rationalization and closer integration of these two industries under the auspices of the 1965 Agreement, there loom problems for Canadian autonomy — problems associated with the control over Canadian firms by U. S. parent firms.

The large volume of automotive trade between Canada and the U.S. means that this item features largely in considerations of national balance of payments deficits. Canada has a deficit on current account and this is balanced by large capital inflows, mainly

from the U. S. In recent years the U.S. Government has sought to improve the U.S. balance of payments by reducing capital outflows. Two recent events show that U.S. Government directives could affect the future operations of subsidiaries in Canada. In 1963 there was proposed an interest equalization tax on U.S. funds abroad and, in December 1965, a U. S. balance of payments crisis produced a "Guidelines Policy" whereby foreign subsidiaries of U.S. companies were required to limit expansion by means of capital transfers from the U.S. Canada was given exemption from both these measures, but there is no guarantee that this would always be the case.[5]

The thesis is limited to supply aspects in the Canadian automotive industry and only briefly mentions demand considerations. The demand function is complex and depends upon population trends, trends in car-owning age, consumer credit, general economic conditions, and, ultimately, consumer tastes and preferences.

Part I comprises six chapters which describe the automotive industry and the terms of the 1965 Agreement. Part II contains two chapters of analysis and appraisal, and a concludory chapter.

Chapter II describes the past and present structure of the automotive industry, while the automotive tariff history and events leading to the implementation of the 1965 Agreement are discussed in Chapter III. The actual terms of the Agreement are set out and explained in Chapter IV. The two subsequent chapters describe the

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[5]These events are described in, Walter L. Gordon, A Choice for Canada (Toronto: McClelland and Stewart, 1966), pp. 74-76.

available statistics as they relate to industry trends in costs, productivity, production, imports and exports. The basis of the appraisal of the success of the Agreement is the description of the oligopolistic structure of the industry which appears in Chapter VII. Chapter VIII then considers the main areas of contention in which the future success of the Agreement will be judged. The conclusions of the thesis are embodied in Chapter IX.

CHAPTER II

THE STRUCTURE OF THE AUTOMOTIVE INDUSTRY IN NORTH AMERICA

A. Development of the Canadian Automotive Industry[1]

Automobile manufacturing began in 1904 when Ford Motor Company of Canada set up an assembly plant in Windsor, Ontario. In the period to 1925 the industry increased in size to include three more automobile companies: The Chrysler Corporation of Canada became established in Windsor, General Motors of Canada in Oshawa, and Studebaker of Canada in Walkerville. In 1946, the Nash Motor Company began producing automobiles in Toronto, ceased this operation in 1957, and opened up a new plant in Brampton, Ontario, under the name of American Motors of Canada. The Studebaker Company, which earlier had transferred all North American automobile production to Canada, ceased all automobile operations in early 1966.

In the early stages of development of the Canadian automobile industry, parts and accessories were mostly imported from the U. S. In later stages of development, Canadian firms became established to supply the Canadian finished vehicle manufacturers with parts.

B. Present Automotive Industry Structure

There are four stages in the production of automobiles: component fabrication, engine production, parts manufacturing, and assembly of the finished vehicle.[2] There is a subtle difference between a "component" and a "part". A "component" is something which,

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[1] See V. W. Bladen, Report, Royal Commission on the Automotive Industry (Ottawa: Queen's Printer,1961), p.5.

[2] Canada, Department of Labour, Technological Changes and Skilled Manpower: The Automobile and Parts Manufacturing Industries (Ottawa: Queen's Printer, 1960), p. 3.

after assembly, becomes an integral part of the chassis (eg., body stampings, transmissions, axles, brake drums). A "part" denotes ancillary items such as batteries, wheels, tires, headlights, wiring, etc. For the purpose of identification, the automobile industry is usually defined as those establishments principally engaged in component fabrication, engine production, and finished vehicle assembly. The automotive parts industry is defined as those establishments principally involved in parts production.

Since the conclusions of this thesis rely to a large extent upon comparisons of the Canadian and U.S. automotive industries, it would be convenient if these two industries could be compared directly, by separating out the finished vehicle manufacturing operations and the parts manufacturing operations. Unfortunately, this cannot be done for a number of reasons. First, firms may manufacture goods for the automotive market, and also for other than the automotive market. The censuses of manufactures in Canada and the U.S. are compiled on the basis of firms whose main product is destined for the automotive market. Thus the borderline between firms included in the classifications is somewhat arbitrary. Second, motor vehicle manufacturing firms are not solely assemblers of finished vehicles; their operations also include some parts production which is counted as part of their final product. These difficulties are compounded by the fact that parts and accessories are destined for two types of end use: for installation in new vehicles (the original equipment market), and for replacement of worn out parts in used vehicles (the aftermarket). There are no statistics available, however, which indicate the end use of production of automotive parts.

The structure of the Canadian industry is changing as the finished vehicle manufacturers produce more and more of their own needs in parts and also expand into the automotive aftermarket, in competition with existing Canadian and U.S. parts and accessories firms.

> Thus new vehicle manufacturers are now going into 'all make' parts and accessories programmes, which means that they hope to successfully move into each other's after-market and capture a large share of the business available.[3]

The degree of integration in the automotive industry is different in Canada and the U.S. Finished vehicles are produced in the U.S. by companies which, to a large extent, also manufacture the parts for these finished vehicles. The Canadian finished vehicle industry is much more an "assembler" of finished vehicles, this being a result of the protective tariff[4] which was designed to achieve a certain degree of manufacturing as well as assembly in Canada.

> Chrysler of Canada is primarily an assembler of vehicles and engines. It does some manufacturing, body building and machining and assembly of engines. Engine blocks, crankshafts and connecting rods are purchased from Canadian suppliers as rough castings and forgings and are machined into finished components. Ford operates extensive body building, machining and stamping facilities as well as a large engine plant in Windsor. It also has foundry facilities to supply the major part of its requirements for castings, particularly its engine blocks. General Motors and McKinnon Industries together constitute the most highly integrated operation in Canada, as one might expect in view of the larger volume of their production . . . . They manufacture

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[3] Emil J. Bonkoff, A Report on the Changed Automotive Aftermarket in Canada (Montreal: Dominion Brake Shoe Company, 1964), p. 22.

[4] See Chapter III.

> a variety of parts and types of equipment not made by the other Canadian automobile manufacturers. They operate a large forge and both grey iron and malleable iron foundries. They produce six-cylinder and eight-cylinder engines. They manufacture stampings, including fenders and hoods. They also produce other components, including transmissions, differentials, brake assemblies and a wide range of electrical equipment.[5]

The possibility for increased integration in a firm's operations varies with the size of the output, and reflects the Canadian "content" requirements.[6] Briefly, these content requirements have meant that Canadian finished vehicle manufacturers have had to incorporate a certain amount of Canadian-made parts in finished vehicles. The finished vehicle manufacturers, which had a large enough volume of finished vehicles to be able to produce parts themselves in sufficient quantity to be of low cost, have been able to integrate their operations. Otherwise, the finished vehicle manufacturers are supplied with parts by independent Canadian parts suppliers and imports from the U. S.

The available statistics on the Canadian and U. S. industries are not sufficient to make direct comparisons possible. Separate statistics are given for the Canadian vehicle and Canadian parts industries, but, in the U. S., the operations of vehicle and parts manufacturers are aggregated into one industry. Thus, comparisons between these three industries have no meaning, but trends in the industries are important and comparisons of these trends is somewhat possible.

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[5] This is the situation as it existed in 1960, according to V. W. Bladen, Report: Royal Commission on the Automotive Industry (Ottawa: Queen's Printer, 1961), p. 23.

[6] See Chapter III.

The description of the Canadian Automotive Industry is contained in two publications, namely, The Census of Motor Vehicle Manufacturers and The Census of Motor Vehicle Parts and Accessories Manufacturers.[7]

The Motor Vehicle Manufacturing industry covers the operations of establishments primarily engaged in manufacturing or assembling complete motor vehicles such as passenger automobiles, commercial cars and buses, trucks, and special purpose motor vehicles such as ambulances and taxicabs.

The Motor Vehicle Parts and Accessories industry covers the operations of establishments primarily engaged in manufacturing motor vehicle parts (except truck and bus bodies)[8] and accessories for use on motor vehicles such as, engines, brakes, clutches, axles, gears, transmissions, wheels, frames, radiators, springs, automobile hardware, heaters, horns and mirrors.[9] It should be noted that this series does not include those establishments which are engaged in parts production, but which do not report since the proportion of automotive production in their total production is small.

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[7] Canada, Dominion Bureau of Statistics, Motor Vehicle Manufacturers, Annual Census of Manufactures (Ottawa: Queen's Printer), and, Canada, Dominion Bureau of Statistics, Motor Vehicle Parts and Accessories Manufacturers, Annual Census of Manufactures, (Ottawa: Queen's Printer).

[8] Heavy bus and truck production is different in that vehicles are built to the specifications of users and are not generally massed produced. The industry is described in: Canada, Dominion Bureau of Statistics, Truck Body and Trailer Manufacturers (Ottawa: Queen's Printer).

[9] Canada, Dominion Bureau of Statistics, Motor Vehicle Parts and Accessories Manufacturers, 1961, Annual Census of Manufactures (Ottawa: Queen's Printer), p. 7.

The annual census report on the motor vehicle parts and accessories manufacturers is a much weaker series than the motor vehicle manufacturers' report. Whereas the one on automobile manufacturers has complete coverage, the parts and accessories series may canvas as few as 60 per cent of the suppliers. For example, General Motors has a very large parts plant which is called an integral part of the manufacturing plant and is reported as such. Thus, the parts manufacturing series is probably good only for trend.[10]

The description of the U. S. automotive industry, as contained in the U.S. Annual Census of Manufactures,[11] is the most comprehensive presentation of statistics on the industry. The U.S. Motor Vehicles and Equipment industry includes establishments engaged primarily in the manufacture or assembly of complete passenger automobiles, car bodies, trucks, commercial cars and buses, special purpose motor vehicles and motor vehicle parts and accessories. Since many large establishments have integrated operations, which include the production of parts or bodies and the assembly of complete vehicles on the same location, the data from the census of manufacturers show combined operations for the U. S. Motor Vehicle and Equipment industry.

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[10] This information regarding the Parts and Accessories manufacturers was obtained from D.B.S., Ottawa.

[11] U. S. Department of Commerce, Bureau of the Census, Motor Vehicles and Equipment, Annual Census of Manufactures (Washington: U. S. Government Printing Office). This industry is defined as Class 3717 in: U.S., Department of Commerce, Bureau of the Census, Standard Industrial Classification Manual, 1957 (Washington: U. S. Government Printing Office).

Included in industry 3717[12] are such parts as passenger-car bodies, motor vehicle engines (except Diesel), brakes, clutches, axles, radiators, differentials, transmissions, wheels and frames, windshield wipers, automotive bumpers, camshafts, connecting rods, crankshaft assemblies, cylinder heads, drive shafts, exhaust systems, fuel systems, heaters, hoods, horns, instrument board assemblies, lubrication systems, mufflers, power-transmission equipment, rear-axles housings, shock absorbers, steering mechanisms, tops (except stamped metal), universal joints, wheel rims, windshield frames, and other automotive accessories.[13]

A considerable number of components, parts and accessories for motor vehicles are not classified in industry 3717, but are classified in other Standard Industrial Classification industries based on the characteristic of the product itself rather than the specific application. Among the more important of these are automotive hardware, industry 3429; automotive stampings, industry 3461; Diesel and semi-Diesel engines, industry 3519; sealed beam and other electric lamps, industry 3641; motor vehicle lighting fixtures, industry 3642; bearings, industry 3566.[14]

Motor Vehicle and Equipment companies frequently operate separate establishments manufacturing components, parts, and accessories for automotive use. These establishments are not classified in industry 3717. Therefore, to obtain an overall picture of automotive components,

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[12] The U.S. Motor Vehicles and Equipment Industry.

[13] Ibid, Explanations and Notes.

[14] Ibid.

parts and accessories associated with the manufacture or assembly of complete motor vehicles and equipment, reference must also be made to many of the industries outside of industry 3717.

North American-style passenger car assembly is at present carried on in Canada by four companies, namely, General Motors of Canada, Ford Motor Company of Canada, Chrysler Canada, and American Motors (Canada).[15] All of these companies, except American Motors (Canada), also produce commercial vehicles. The non-North American passenger car assembly in Canada involves one Volvo plant, opened in 1963, with a capacity of 8,000 units per year; assembly facilities for Renault and Peugeot, opened in 1965, with a combined capacity of 8,000-10,000 units per year, and planned assembly facilities for the Japanese companies Toyoto and Izuzu, with a capacity of 10,000 vehicles per year.

Commercial vehicle production was carried on, in 1963,[16] by a further twelve companies, namely, Prevost Car Inc., Sherbrooke Coach Manufacturing Company, Sicard Inc., F. W. D. Corporation (Canada), International Harvester Company of Canada, Kaiser Jeep of Canada, Motor Coach Industries, Western Flyer Coach, Canadian Kenworth, Freightliner of Canada, Hayes Manufacturing Company, and Pacific Truck and Trailer.

A precise count of the number of firms in the Canadian automotive parts industry is difficult, depending upon the definition of an automotive parts firm. This is because some firms in the industry are also

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[15] Studebaker of Canada ceased operations in March, 1966.

[16] The latest count of commercial vehicle manufacturers was the 1963 Census of Manufacturing.

involved in the production of non-automotive goods. The 1963 Canadian Census of Manufacturing estimates that there are 136 firms in the Canadian automotive parts industry. This figure only includes firms which produce the major part of their output for the automotive industry. Various unofficial press sources estimate the number to be between 165 and 250, if all the Canadian firms which produce automotive products are included.

As is shown in Table II-1, there were 1958 establishments in the U. S. in 1963, which were classified in the U. S. Motor Vehicles and Equipment industry. The number of establishments in the U. S. is computed on the same basis as in Canada, namely, only those establishments are counted which produce mainly automotive products. The U. S. census, however, aggregates all U. S. automotive operations in one industrial classification.

Employment concentration ratios are shown in Table II-2, for the year 1963. The purpose of concentration ratios is to show the size distribution of firms in the industry. Perhaps the most significant fact in this Table is that in 1963, there were as many as 27 per cent of U. S. firms with under five employees. In the Canadian parts industry the figure was 10 per cent, while the Canadian motor vehicle industry contained no firms with under five employees.

This chapter has given a broad view of the automotive industry structure in North America. In Canada this structure has been a result of the protective Canadian and foreign tariffs. It is the task of the next chapter to describe these tariffs as they applied to the development of the automotive industry.

TABLE II - 1

NUMBERS OF ESTABLISHMENTS IN THE AUTOMOTIVE INDUSTRY BY SIZE OF EMPLOYMENT

(For the year 1963)

	Number of Employees per Establishment			
	Under 5	Under 50	Under 500	Total
Canadian Motor Vehicle Industry	0	8	12	18
Canadian Parts and Accessories Industry	13	69	129	136
U. S. Motor Vehicle and Equipment Industry	536	1345	1734	1958

Sources: Canada, Dominion Bureau of Statistics, Motor Vehicle Manufacturers, Annual Census of Manufactures (Ottawa: Queen's Printer), and Canada, Dominion Bureau of Statistics, Motor Vehicle Parts and Accessories Manufacturers, Annual Census of Manufactures (Ottawa: Queen's Printer); and U. S., Department of Commerce, Bureau of the Census, Motor Vehicles and Equipment, Annual Census of Manufactures (Washington: U. S. Government Printing Office).

TABLE II - 2

EMPLOYMENT CONCENTRATION RATIOS IN THE AUTOMOTIVE INDUSTRY

(For the year 1963)

	Number of Employees per Establishment			
	Under 5	Under 50	Under 500	Total
Canadian Motor Vehicle Industry	0	44%	67%	100%
Canadian Parts and Accessories Industry	10%	51%	95%	100%
U. S. Motor Vehicle and Equipment Industry	27%	69%	89%	100%

Source: Derived from Table II-1.

CHAPTER III

HISTORY OF THE CANADIAN CUSTOMS TARIFF AND EXCISE TAXES APPLYING TO THE AUTOMOTIVE INDUSTRY, AND FACTORS LEADING TO THE AUTOMOTIVE PRODUCTS TARIFF AGREEMENT OF 1965.

The last chapter described the organization of the automotive industry in Canada. This chapter will describe the various levies to which the industry was subjected during its development up to the present time. The last sections of this chapter will indicate the reasons for the tariff changes which have been made in recent years, especially the tariff change of 1965.

A. History of the Canadian Automotive Customs Duties and Excise Taxes[1]

Since its inception, the Canadian automotive industry has been subjected to three different kinds of levy: a customs tariff, an excise tax known as the "general manufacturers" sales tax, and a special automobile excise tax. These rates are all ad valorem.

The basic form of the Canadian tariff has not been changed since 1907. Basically, there are three separate rates under the Canadian customs tariff: preferential, intermediate, and general. The preferential rates apply to Britain and other British Commonwealth countries; the intermediate tariff (since 1948, the most-favoured-nation tariff under the General Agreement on Tariffs and Trade) is a minimum for those countries which do not use customs tariffs as a source of revenue,

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[1] See V. W. Bladen, Report: Royal Commission on the Automotive Industry (Ottawa: Queen's Printer, 1961), Chapter II; and Motor Vehicle Manufacturers' Association, Facts and Figures of the Automotive Industry, 1965 (Toronto), p. 4.

or which have trade agreements with Canada; the general tariff rate stipulates the maximum rate applicable to other countries not otherwise provided for.[2] Customs duty is paid on the value as assessed for customs duty.

It is the marketing practice in major motor vehicle producing countries for manufacturers to sell automobiles through dealers. The manufacturer's price to dealers is generally established on the basis of discounts from the suggested list price depending upon the quantity purchased by the dealer. At the present time, the acceptable value for duty purposes is the manufacturer's price to dealers in the home market. Thus, for automobiles imported into Canada from the U. S., the value for customs duty is the price paid by U. S. dealers to U.S. manufacturers.[3]

Canadian excise taxes are applied, in the case of goods manufactured and produced in Canada, on the manufacturer's selling price exclusive of all other excise taxes. When goods are imported, the tax is imposed on the duty paid value.[4]

The customs and excise tax changes applying to the Canadian automotive industry are now described beginning from the start of the industry in 1904.

In 1904 the infant Canadian automobile industry was protected against imports by a high tariff barrier, namely 35 per cent ad valorem,

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[2] W. J. C. Wright, "Customs and Excise in Canada: History and Development," Customs and Excise Examiner, February, 1965, 17.

[3] V. W. Bladen, op. cit., p. 33.

[4] Canadian Tax Foundation, The National Finances, 1965 (Toronto, 1965), p.45.

except for automobiles imported from the U. K. Since imports from the U. K. were negligible, however, the 35 per cent tariff served mainly as a deterrent on imports from the U. S.

According to Professor Bladen the cost of automobile production in Canada was then much greater than in the U. S., because of the difference in scale of production. Consequently, the price of automobiles to the Canadian consumer was much greater than the price of a similar automobile in the U. S.[5]

In 1922 a special excise tax was imposed. This was of 5 per cent or 10 per cent depending on the value of the vehicle and served to further increase the differential in price between U. S. and Canadian automobiles. In an effort to reduce this price differential, industry protection provided by the Canadian tariff was reduced in 1926. Imports were allowed from the U. S. as follows: 20 per cent tariff on vehicles valued at less than $1200, and 27½ per cent on vehicles valued at over $1200. British preferential rates were lower than these but were of little importance due to the small numbers of British imports.

As a result of this reduction in protection for the automobile producers, who were dependent upon the import of parts from the U. S. for their Canadian operations, the tariff on automobile parts from the U. S. was reduced. A number of parts and accessories, of a class or kind not manufactured in Canada, were made free of duty when

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[5] V. W. Bladen, op. cit., p. 7. Bladen does not quote any statistics to support this statement. The estimated differential at the present time is $150 per car for 1965 models. This is quoted in: Hon. C. M. Drury, Prices of Cars in Canada, News Release (Ottawa: September 30, 1965.)

imported as original equipment for use in the automobile manufacturing industry. In addition, the notion of a "content" requirement was introduced for the first time. This content requirement provided for a drawback of a portion of the import duty paid when the finished vehicle had a factory cost which included at least 50 per cent of British Empire content. If the finished vehicle qualified as to Empire content, and its value was not more than $1200, then it was also exempt from the current 5 per cent excise tax.

In 1931 a third tariff duty bracket was added to the two duty brackets introduced in 1926. This imposed a tariff of 40 per cent on passenger vehicles valued at over $2100. A year later the U.K. was granted duty-free importation for all motor vehicles.

The trend towards decreased tariff protection of the Canadian industry continued when the 1936 Canada-U.S. Trade Agreement came into force.[6] Previous to this date U.S. goods had entered Canada under the general tariff, but subsequent to this date imports from the U.S. were subject to duty under the intermediate tariff. The new rates on automobiles were: 17½ per cent on automobiles valued at less than $1200, 22½ per cent on automobiles valued between $1200 and $2100, and 30 per cent on those valued over $2100.

Later in the same year, 1936, the intermediate tariff rate became 17½ per cent for all imported vehicles irrespective of value. Provision was also made by Order-in Council for the tariff to be raised

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[6] Canadian Tax Foundation, op. cit., p. 47.

to 22½ per cent if it appeared as if the Canadian manufacturers would suffer unduly by this reduction in protection.

Protection for the automotive parts industry was continued by the 1936 tariff revisions, but in a slightly different form. Parts which were of a class or kind not made in Canada were admitted duty-free. Free entry of other parts was conditional upon the finished vehicle having some minimum Empire content.

The content requirements under which manufacturers could import automotive parts that were made in Canada were:

> Manufacturers achieved Empire content equal to 40 per cent of the factory cost of automobile output (excluding duties and taxes) if factory production did not exceed ten thousand complete passenger cars during the year in which importation was sought; equal to 50 per cent if factory production was between ten thousand and twenty thousand; and equal to 60 per cent if annual production exceeded twenty thousand complete passenger cars. Truck manufacturers were granted similar privileges, with the maximum Empire content set at 50 per cent for manufacturers with output in excess of ten thousand vehicles per annum.[7]

The logic behind the conditional free entry of parts was that, in a large number of cases, the U.S., with its greater facilities, could manufacture parts at such a low cost compared to Canada that, even with a high duty on imports into Canada, the Canadian manufacturers would still buy from the U.S. The effect of this would be to increase the finished vehicle price. Since this higher price must be passed on to the consumer, there was a chance that consumer demand would decrease, consequently reducing the market for those manufacturers which did manufacture automobile parts for sale in Canada.

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[7] Sun Life Assurance Company of Canada, The Canadian Automotive Industry, Royal Commision on Canada's Economic Prospects (Ottawa: Queen's Printer, 1956), p. 5.

From 1936 to the present time there have been no changes in basic automobile tariff rates:[8] British vehicles continued to be imported duty-free under the preferential tariff, and the intermediate tariff rate was 17½ per cent. The intermediate tariff has become the most important classification as other countries joined the G.A.T.T. and were given the benefit of the most-favoured-nation rates (intermediate tariff rates) under the Geneva Agreement of 1948. The general tariff rate for automobiles was 27½ per cent.

Since 1936 the basic tariff applying to automotive parts has remained unchanged.[9]

The present classification and duty rates for the automobile and automobile parts industries are described in Schedule A, Group VIII, Item 438 of the Canadian Customs Tariff.[10] The rates are ad valorem.

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[8]The tariff rates, as set out in the Statutes of Canada, are the same as described in this chapter. The tariff amendments, which were instituted by Order-in-Council in 1965, do not alter the tariff rates for all prospective importers. The conditions under which certain Canadian manufacturers import automotive products duty-free are described in Chapter IV.

[9]As explained in Chapter IV, original equipment parts can be imported into Canada from the U.S. by certain qualified Canadian manufacturers. Imports from all other countries apart from the U.S. are subject to the tariff rates described in this chapter.

[10]See Revised Statutes of Canada, 1952, c.60,316, and the amendments: 1955, c.51; 1958,c.27; 1959,c.12.

The principal items of the Canadian customs tariff may be briefly described[11] as follows:

438a This item establishes the rate on all types of motor vehicle: free under the British Preferential tariff; 17 per cent for Most-Favoured-Nations; 27½ per cent General Tariff.

438b A list of parts used by the Canadian automobile parts industry: if these are of a class or kind not made in Canada, they enter free of duty except when imported at 30 per cent duty from General Tariff countries; if these parts are of a class or kind made in Canada they are free under the British Preferential Tariff, 17½ per cent for Most-Favoured-Nations, and 30 per cent under the General Tariff.

438c A list of finished parts generally used by the Canadian automobile manufacturer in production: free under the British Preferential Tariff; 17½ per cent for Most-Favoured-Nations, but free for this tariff class if a double content requirement is met, viz, the parts are of a class or kind not made in Canada and 40 per cent of factory cost is Canadian for production under 10,000 units per year, 50 per cent of factory cost for production between 10,000 and 20,000 units per year, 60 per cent of factory cost for production over 20,000 units per year; the General Tariff is either 25 per cent or 30 per cent for these types of parts.

438d Parts used in the manufacture of commercial vehicles: free under the British Preferential Tariff; 17½ per cent under the Most-Favoured-Nation Tariff, but free for this tariff class if the parts are of a class or kind not made in Canada and, at the same time, a 40 per cent commonwealth content is met, whatever the scale of production; the General Tariff is 27½ per cent.

438e This item defined the rates on internal combustion engines and engine parts when not of a class or kind made in Canada: free under the British Preferential Tariff; a tariff between 7½ per cent and 17½ per cent for Most-Favoured-Nations; 27½ per cent General Tariff.

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[11] V. W. Bladen, op. cit., p. 8.

438f This item covers parts not otherwise provided for: free under British Preferential Tariff; 25 per cent for Most-Favoured-Nation; and 35 per cent General Tariff.

438i A list of minor parts for commercial vehicles: free except for the General Tariff rate of 20 per cent.

Although the customs tariff rates have remained unchanged since 1936 the excise tax rate on automobiles has not. The tax rose as high as 90 per cent during the War period, and dropped to a rate of 10 per cent in 1945. In 1947, to conserve foreign exchange the automobile excise tax increased from the 10 per cent rate to 25 per cent on vehicles valued at $1200 and less, 50 per cent on those valued from $1200 to $2000, and 75 per cent on those valued at more than $2000. By 1948, the exchange crisis had receded and the tax was reduced to the former flat rate. In the following years the excise tax increased to as high as 25 per cent, but had been reduced to 7 per cent by 1957.[12] In 1961 this tax was completely removed in order to provide a stimulus to the industry.[13]

A 10 per cent import surcharge was in force on all imported motor vehicles from June 25th, 1962 to March 31st, 1963, in another effort to conserve foreign exchange.

At the time of writing, the only excise tax applying to automotive products is the 11 per cent general manufacturer's sales tax. The sales tax is a tax of general application, in that it applies to all goods manufactured or produced in Canada or imported into Canada,

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[12] Canadian Tax Foundation, op. cit., p. 45.

[13] The Bladen Report, op.cit.,p.60, recommended the removal of

unless the goods are exempted by a provision of the Exise Tax Act.

This section has described the customs tariffs and excise taxes as they apply to the Canadian automotive industry on a historical basis, and also as they are written at present in the Canadian Statute Book. In recent years, however, there have been tariff reductions for certain qualified manufacturers. These tariff reductions have not applied to other than these qualified manufacturers and have not altered the tariff rates except for these qualified manufacturers.

These recent tariff changes were carried out by Order-in-Council and are described in the next section.

B. Recent Automotive Tariff Changes

The position of the Canadian finished vehicle industry throughout the 1950's was one of diminishing production in the face of increased imports. The position of the industry is shown by Table III-1, on the next page. This table shows that, whereas imports increased nearly three times in the period 1953-60, Canadian production declined by one sixth in the same period. The slackening of domestic production, while imports increased substantially, posed a real problem for the future of the industry in Canada. At the same time as imports of finished vehicles were gaining in the Canadian market, the combined effect of imports of parts and vehicles as opposed to exports of parts and vehicles was such as to produce a growing automotive trade imbalance.

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this excise tax to stimulate production in the industry, and this recommendation was the only one which was immediately implemented by the Canadian Government.

TABLE III-1

CANADIAN VEHICLE PRODUCTION AND IMPORTS, 1953-60:

NUMBERS OF VEHICLES. ('000)

Year	Canadian Production	Imports	Ratio of Imports to Production
1953	481	58	12%
1955	455	58	13%
1957	412	82	20%
1960	397	183	46%
1961	388	121	31%
1963	629	66	11%
1965	841	145	17%

Sources: Canada, Dominion Bureau of Statistics, Motor Vehicle Manufacturers, Annual Census of Manufactures (Ottawa: Queen's Printer)

and Canada, Dominion Bureau of Statistics, Trade of Canada: Imports by Commodities (Ottawa: Queen's Printer).

and Tables VI-1, VI-4, and VI-5, Chapter VI.

The automotive trade imbalance is shown in Table III-2.

As a result of the declining automobile output and the large automotive trade imbalance, the Government introduced three tariff amendments, namely in 1962, 1963, and 1965. The first two amendments were designed to stimulate Canadian production by the subsidization of exports, while the 1965 amendment was a comprehensive plan to rationalize production on the whole of the North American continent.

TABLE III-2

FOREIGN TRADE IMBALANCE IN AUTOMOTIVE PRODUCTS, 1950-65

($'000,000)

Year	Imbalance
1950	- 204
1952	- 140
1953	- 244
1955	- 324
1963	- 595
1965	- 791

Sources: Canada, Dominion Bureau of Statistics, Trade of Canada: Exports by Commodities (Ottawa: Queen's Printer).

and Canada, Dominion Bureau of Statistics, Trade of Canada: Imports by Commodities (Ottawa: Queen's Printer).

and Table VI-1, Chapter VI.

The Order-in-Council method was used to implement the three tariff changes on automotive products in 1962, 1963, 1965. This method was used since:

> In general, such changes by Order-in-Council are of a temporary nature and are usually limited to materials

> imported for manufacturing purposes in Canada. As a rule these temporary changes are for the reduction or elimination of existing rates, or they may provide for a drawback of all or part of the import duties.
>
> . . . . . .
>
> Tariff items established by Order-in-Council are intended to provide temporary assistance to Canadian manufacturers. The life of these items is usually for one or two years depending upon the circumstances, although this period may be extended by the same procedure, and the terms of the enactment may be made permanent in a subsequent Parliamentary Budget.[14]

The Order-in-Council, P.C. 1962-1/1536, announced in 1962 that remission of the 25 per cent duty on automatic transmissions and engines (up to an annual limit of 10,000 per motor vehicle manufacturer) could be earned during the one year trial period commencing the announcement of the Order-in-Council.

For every dollar of Canadian content of exports of motor vehicle parts in excess of the Canadian content of exports of parts during the base period from November 1, 1961 to October 31, 1962, duties would be remitted on a dollar's worth of transmission or engine imports. This tariff change was designed primarily for increasing the export of Canadian built parts. The upper limit of 10,000 per manufacturer per year on the importation of duty-free transmissions and engine blocks did not give rise to a large-scale decision on the part of all the Canadian manufacturers to begin production of automatic transmissions, although, prior to this tariff change, none were being produced in Canada. General Motors of Canada did announce that it would set up a

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[14] W. J. C. Wright, op. cit., p. 19.

Canadian transmission plant, but did not immediately begin production. At the present time General Motors does manufacture automatic transmissions in Canada, but it is not known whether the volume produced is sufficient for all of General Motors' Canadian finished vehicle production.[15]

The 1962 tariff change was cancelled by the tariff amendment embodied in the 1963 Order-in Council, P.C. 1963-1/1544, which remitted the tariffs on all imports of motor vehicles and original equipment parts to the extent that the Canadian content incorporated in exports of motor vehicles and parts of the companies in question exceeded that of the base year, November 1, 1961, to October 31, 1962. Canadian companies could only qualify under this tariff order, however, if 40 per cent of vehicles produced by the company in Canada were sold in Canada.

This tariff amendment was in effect for nearly two years before another Order-in-Council implemented the 1965 Automotive Products Tariff Agreement. While the changes in production and trade after 1963 can be seen[16] to have been in the directions desired by the 1962 and 1963 tariff changes, there was one disconcerting result.

A number of complaints were made by U.S. manufacturers who considered that the subsidization of Canadian exports to the U.S. was a form of 'dumping.' These complaints were directed to the U.S. Government and retaliatory action in the form of countervailing duties

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[15] There is no convenient source of information on this point.

[16] See Chapter VI.

was demanded under section 303 of the U.S. Tariff Act of 1930.[17] Under this Act it is not necessary for the U.S. manufacturer to prove a definite loss, but only to show the strong possibility of loss, to business by aid in the form of a bounty to a foreign manufacturer.

C. Immediate Background to the 1965 Agreement[18]

Although the two tariff changes of 1962 and 1963 were followed by a stage of increased automotive production and exports, it was by no means clear that the tariff changes p roduced the production and exports increases. Imports increased at the same time and at a faster rate than exports, and the period was marked by a sharp rise in automobile sales, both in Canada and the U.S. In any case, the automotive trade imbalance was still large and increasing. In 1963 the de f icit was nearly $600 million; approximately 95 per cent of this deficit occurred through the imbalance in automotive trade with the U.S.

Another consideration prior to the 1965 Tariff Agreement was that the Canadian consumer paid more for his automobile, whether it was imported or produced domestically, than did the U.S. consumer for a similar vehicle. The most widely accepted reason for this was the

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[17] Hearings before the Committee on Ways and Means, The Automotive Products Trade Act of 1965, H.R. 6960 (Washington: U.S. Government Printing Office, 1965), p. 2.

[18] The statistics in this section are taken from Chapters V and VI, and are used here to illustrate the situation prior to the 1965 Agreement.

cost differential resulting from shorter production runs in Canada.[19]

An estimate of the differential in car prices to Canadian and U.S. consumers is quoted below for 1965 model year vehicles:

> "It will be of interest to all to learn that a comparison of prices at the factory for the standard popular model of all cars widely purchased in Canada and the U.S., for the 1965 model year, discloses an average price differential of a little less than $150. Looking at Canadian prices in relation to American prices for these popular cars, the differential is about 8 per cent for the 1965 models. I want to emphasize this figure of $150. We should be clear that what the automotive program can do , and I am confident will do in time, is to remove the $150 differential now separating Canadian and American car prices at the factory."[20]

This, then, was the situation of the Canadian automotive industry by 1964: a growing imbalance in foreign trade, a continuing price differential compared to the U.S., a boom in production, and the threat of countervailing duties on exports to the U.S.

With the stated aims of increasing production, reducing the unfavorable automotive trade balance, and reducing the automobile price differential, the 1965 Canada-U.S. Automotive Products Trade Agreement was introduced. The terms of this Agreement are set out in the next chapter.

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[19] See for instance: D.H. Fullerton and H.A. Hampson, Canadian Secondary Manufacturing Industry, Royal Commission on Canada's Economic Prospects (Ottawa: Queen's Printer , 1957).

[20] Hon. C.M. Drury, Prices of Cars in Canada, News Release (Ottawa: September 30, 1965). U.S. - Canada car prices differential was probably different for 1965 and earlier years; data was lacking on the amount of the differential for earlier years.

CHAPTER IV

THE PURPOSES AND TERMS OF THE CANADA - U.S. AUTOMOTIVE PRODUCTS TARIFF AGREEMENT OF 1965

This chapter discusses the actual terms of the Agreement and interprets them in a general manner, so as to set the stage for the examination of industry statistics in the next chapter and the subsequent theoretical analysis of Part II.

A number of lengthy official quotes on the aims of government are presented at the outset in order to establish the purposes of the Automotive Agreement.

A. Stated Aims of the Automotive Agreement

The following quotes will show that the Canadian government has three basic long-term objectives for the Canadian automotive industry: first, the closer rationalization of the Canadian and U.S. industries into one North American industry in order to increase the competitiveness of the Canadian industry vis-à-vis the U.S. industry. Implicit in this aim is the assumption that expansion of the Canadian industry will enable substantial cost savings to occur through economies of larger-scale production; second, the expansion of employment in the industry; third, the reduction of Canada's foreign trade deficit.

According to the News Release which accompanied the announcement of the Agreement in 1965:[1]

> This program (the Automotive Products Tariff Agreement, 1965) is designed to achieve a substantial expansion in production and

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[1] "News Release", Department of Industry, Ottawa, Jan. 15, 1965.

employment and promote improved competitive efficiency in this important sector (i.e., automotive sector) of Canadian manufacturing.

For the first time, Canadian motor vehicle producers will have free access to the U.S. as well as to Canada. This will help them to improve their competitive positions in world markets generally.

The Canadian automotive parts industry will have a largely expanded market for components in Canada. It will also have new opportunities to sell its products throughout the vast U.S. market.

The program will make an important contribution to the improvement of Canada's international payments situation. In recent years trade in vehicles and components has resulted in an annual deficit with the U.S. of the magnitude of $600 million. Increased output and improved efficiency in the automotive industries will help to achieve the government's objective of reducing Canada's current account deficit.

A few months later the following words [2] were spoken by the Prime Minister in answer to a question in Parliament:

The Government's automotive program is an attempt to get higher employment and lower costs, and I am confident that this can be achieved in time. Both the industry and the consumer will benefit from expanded Canadian production and employment on a scale which will raise efficiency and cut costs and therefore gradually make it possible to bring U.S. and Canadian prices together. Cutting prices at once would merely take away people's jobs. If we are not going to do that and we do not want to perpetuate higher costs and prices, some time must be allowed in carrying through the program that has been started.

And the Minister of Industry answered another question in Parliament by saying:

The automobile plan offers new opportunities to Canadian automotive parts manufacturers for expanded production, rationalization of output and reduced costs. If Canadian parts' makers are to take advantage of the plan, they must be increasingly cooperative and flexible in their operation.

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[2] Right Hon. L.B. Pearson, Hansard, House of Commons Debates, April 13, 1965, p.297.

> In some instances they will be asked by their customers to make new products or to manufacture existing components on an expanded scale and more efficiently. As a result many Canadian parts makers will have to engage in substantial re-equipment and expansion programs to take advantage of the opportunities provided by the plan. In addition, increased working capital will be required in order to operate at expanded levels.[3]

A later News Release[4] contained an even more comprehensive statement:

> A great deal of public interest has been shown in the press and elsewhere concerning the impact of the automotive program on prices of cars in Canada.
>
> When the automotive program was announced on January 15, of this year (1965), I made the following comment on the subject of car prices: 'of significance for the Canadian consumer is the fact that over several years the plan should progressively make possible increased efficiency and reduced costs. Instead this is one of the principal objectives of the entire program. In line with the attainment of lower costs of production, it is to be anticipated, as the program develops, that the forces of competition will gradually result in savings for Canadian consumers in the form of a narrowing differential between Canada and U. S. prices for motor vehicles and components.'
>
> Part of the reduced costs referred to in that statement takes the form of savings in the payment of customs duties. But far more important are the reduced costs which should flow from increased efficiency as the program gets under way and manufacturers of automobiles and parts organize their production to achieve greater specialization and longer production runs to serve North American and world markets. The more significant reduced costs can only be expected over a long period of time, and when the very large new investments currently being made in the automotive industry begin to bear fruit in the form of greater and more efficient production.
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> As these reductions in cost occur, other factors such as higher wages, rising material costs, and higher prices for

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[3] Hon. C.M. Drury, Hansard, House of Commons Debates, June 28, 1965, p. 2907.

[4] Hon. C.M. Drury, News Release, Department of Industry, Ottawa, September 30, 1965.

machinery and equipment and for plant construction will tend to push costs in the other direction. The question of whether on balance total production costs will go down, will go up, or remain stable, depends on the balance of these offsetting forces which affect the costs of manufacturing cars in Canada.

One point, however, should be made crystal clear. On the fair assumption that labour and other costs move more or less together on both sides of the border, we should see a progressive narrowing of the differential in prices of automobiles between Canada and the U. S. during the next three years.

The next section shows the rather complicated formula that the Canadian government expects will realize the aims as set out in this section.

B. The Terms of the Agreement.

This section is a brief description of the conditions of the Agreement.[5] It is left to the following section to elaborate and explain the various terms.

The Agreement is between the governments of Canada and the U. S. and was signed on January 16, 1965. The Agreement provides for the reduction of tariffs on the flow of automotive products between Canada and the U. S under certain specified conditions. In addition, the Canadian government has obtained written assurances[6] from certain Canadian automobile manufacturers as to their future production plans.

Briefly the main points are as follows:

All types of passenger cars, buses, and certain commercial vehicles may be imported duty free only by manufacturers who also produce a similar

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[5] The terms of the Agreement are reproduced in Appendix A.

[6] Reproduced in Appendix B.

type of vehicle in Canada. Most types of automobile parts may be imported duty-free by the manufacturer provided they are used as original equipment in Canadian automobile production.

The concessions of the agreement only extend to certain manufacturers who satisfy and maintain specified levels of production. In order to qualify as a manufacturer under the 1965 Agreement, automobile companies must satisfy three basic criteria during the trial period of the agreement, which lasts until the end of July, 1968:

(i) the Canadian value added in each model year, August 1 till July 31, must not drop below the Canadian value added in the base model year, August 1, 1963 till July 31, 1964.

(ii) the manufacturer must have produced automobiles, of the class he wishes to import, in each of the four consecutive three month's periods in the base year, August 1, 1963, till July 31, 1964.

(iii) the manufacturer, prior to the duty-free importation of a class of vehicle, must have maintained, in the previous twelve months, a ratio of the net sales value of the previous year's production to the net sales value of all vehicles of that class sold for consumption in Canada which is equal to, or greater than, the ratio of the net sales value of all production by the manufacturer in the base year to the net sales value of all vehicles of that class sold for consumption in Canada by the manufacturer in the base year. In any event, this ratio (the values of Canadian production to Canadian sales) must not drop below 75 per cent.

As part of the overall plan for the future of the automobile industry in North America Canadian manufacturers have at the same time

also given written assurances[7] to the Government of Canada as to two extra commitments. These are:

(i) Each Canadian automobile company agrees to increase, each year, the Canadian value added in its production of motor vehicles by an amount equal to 60 per cent of the growth in the market for its sales in Canada, and 50 per cent of the growth in the market for commercial vehicles sales in Canada. If the market declines, then it is agreed that the Canadian value added can decline in the above percentages. Growth of market is determined as the aggregate change in factory cost of production.

(ii) Each company also agrees to increase the dollar value of Canadian value added over and above that of the base year, and also above the additions from the normal growth in the market (as determined in (i) above) by an amount which represents a proportionate amount of the trade imbalance with the U.S. that can be attributed to each manufacturer. This means that, before the end of the 1968 model year, that is, July 31, 1968, the automobile manufacturing industry in Canada undertakes to have increased the Canadian value added by a quantity $260 million[8] over and above that of the base year plus 60 per cent of the growth of the market in Canada.[9] The 'big four' in Canadian automobile manufacturing account for $239 million, namely, General

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[7] See Appendix B for assurances from Ford, Chrysler, General Motors, American Motors.

[8] See Appendix B.

[9] Statistics on market growth are described in Chapter VI.

Motors of Canada, $121 million, Ford Motor Company of Canada, $74 million, Chrysler of Canada, $33 million, and American Motors of Canada, $11 million.

The Automotive Agreement, although not a genuine free trade agreement, is at least a step in the direction of free trade for the North American industry. The Agreement allows future plans to be made regarding the establishment in Canada of new automobile producers, and accepts the possibility of the future extension of the terms of the Agreement to other countries to form a Common Market in automobile products.

Review of the Agreement is to be made before 1968 to evaluate the effects on the economy, and to examine whether the impediments to trade have been removed to enable both Canada and the U.S. to share in the expanding North American market. The Agreement itself is of unlimited duration, but either Government may terminate on twelve months written notice.

C. Comments and Clarification of Terms of the Agreement.[10]

The various conditions of the Automotive Agreement are designed to ensure that the automotive industry in Canada grows as the market for motor vehicles expands in North America. Under the clauses of the Agreement, tariff and other barriers are supposed to have been removed with respect to trade between Canada and the U.S. in finished vehicles and original equipment automotive parts. This is to enable a broader market to give advantages of greater volume and specialization.

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[10] See, N.B. MacDonald, "Address to the Automotive Industries Association, Toronto," News Release, Department of Industry, Ottawa, March 1, 1966.

In order to safeguard the existence and growth of the automotive industry in Canada, only motor vehicle manufacturers in Canada can import duty-free.[11] The privilege of duty-free importation is limited to finished vehicles and original equipment parts only. Original equipment parts are those parts which are used for assembly in new vehicles. The replacement market (or aftermarket) for automotive parts is not a part of the 1965 Automotive Agreement, and normal tariffs apply to those automotive parts which are destined for the aftermarket.

That part of the Automotive Agreement which defines eligibility for duty-free importation into Canada is designed to ensure a continuing assembly industry in Canada. There are two safeguards for this.

Under the Agreement, automobiles are grouped into three classes for duty purposes, namely, passenger automobiles, buses, and specified commercial vehicles. Under certain other conditions, any Canadian manufacturer of automobiles may import automobiles of the same class which he already manufactures in Canada.

The first safeguard to ensure a continuing assembly industry in Canada is that the manufacturer must maintain a ratio of net sales value of Canadian production to net sales value of Canadian sales, in future model years, at a greater value than the 1964 model year, and in any case, not less than 75 per cent. The model year of the Canadian manufacturer extends from August 1 to July 31. The 1964 model year extends from August 1, 1963, to July 31, 1964. The net sales value for any vehicle means the selling price received by the manufacturer

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[11] See "Terms of the Agreement", Appendix A.

for the vehicle, including Canadian transport costs, but minus any sales and excise taxes.[12]

Therefore, the manufacturer must maintain production in Canada at not less than 75 per cent of sales in Canada, and at a higher ratio than 75 per cent (equal to the 1964 model year ratio) if the 1964 model year ratio was greater than 75 per cent.

This requirement permits the Canadian manufacturing company to rationalize its vehicle production. It enables the Canadian manufacturer to produce fewer types of vehicle for supply to the whole of the North American market, and to import other models to satisfy part of its Canadian demand, provided it produces sufficient vehicles in Canada to maintain the base year ratio. Under this condition, cost reductions through economies of large scale should be possible.

The second safeguard to ensure a continuing assembly industry in Canada relates to the value added in Canadian production. Canadian value added means the amount of extra worth which is added in the manufacturing process. It includes real added costs and imputed depreciation and capital allowances.[13]

The Canadian vehicle manufacturer must maintain the same Canadian value added in future Canadian vehicle production, as in the base year 1964. Thus, although the manufacturing company will probably change the output mix of its Canadian production, in the process of rationalizing

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[12] Order-in-Council, P.C. 1965-100, January 16, 1965, as per Section 273, Canadian Customs Act.

[13] See definition in Order-in-Council, P.C. 1965-100, January 16, 1965, reproduced in Appendix C.

that production, the Canadian value added will not decrease below that of the base year.

It should be noted that the first safeguard requires the ratio of Canadian production to Canadian sales to be higher than in the 1964 base year. The numerator refers only to the net sales value of Canadian production and does not include reference to the proportion of Canadian value added (C.V.A.) in that production. As vehicle sales grow in Canada the production in Canada has to grow proportionally, but this condition does not stipulate any C.V.A. requirements. Without the C.V.A. requirement there would be a danger of the collapse of the Canadian Automotive parts industry if the U. S. automotive parts industry is really a lower cost industry and the Canadian vehicle assemblers were permitted complete freedom in buying parts from the U.S. suppliers.

The two previous safeguards are written into the Automotive Agreement, but there are two further safeguards which involve agreements between the Government of Canada and Canadian vehicle manufacturers.[14]

Firstly, each manufacturer has agreed that,[15] as sales in Canada grow, the C.V.A. will increase by 60 per cent of this market growth. The growth in the Canadian market is through sales of domestically produced vehicles and sales of imported vehicles. The increase in C.V.A. can be either via an increase in C.V.A. in domestic production, and/or via increased C.V.A. in <u>parts</u> sold to U. S. vehicle assemblers. In this latter case, the Canadian company must 'arrange' for the use of Canadian

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[14] See "Letters of Agreement," Appendix B.

[15] Of course, if the requirements of the Agreement are not met by the manufacturer, the manufacturer is no longer eligible for duty-free importation of vehicles or parts.

made parts in vehicles assembled in the U. S. Thus, as the market grows in Canada, the growth in C.V.A. will be 60 per cent of this market, and the other 40 per cent will be provided by other than Canadian value added.

Secondly, the automobile companies have agreed to achieve an additional C.V.A., by July 31, 1968, over and above that which is required in terms of the normal growth in the Canadian market. The value of $260 million of additional C.V.A. is to be achieved by the end of the 1967 model year and, in future model years, is to be required annually.

The following model is designed to facilitate interpretation of the rather complicated terms of the agreement, and to show more clearly the requirements imposed upon the Canadian motor vehicle manufacturers if they are to remain eligible for duty-free importation under the agreement.

D. Model of the Requirements Imposed on Canadian Motor Vehicle Manufacturers by the Automotive Agreement.

(i) Net Sales Value of Canadian Production in 1964 model year (net sales value at factory) ..... $A

(ii) Net Sales Value of Imported Vehicles in 1964 model year ..... $B

(iii) Total Sales of Vehicles in 1964 model year ..... $ (A + B)

(iv) C.V.A. in total sales, in 1964, which includes the C.V.A. in domestically assembled vehicles, and includes the C.V.A. in imported vehicles ..... $C

. . In 1964, ratio of C.V.A./sales ..... $\frac{C}{A + B}$

Thus, $\frac{C}{A + B}$ represents the Canadian participation in the Canadian market.

As a result of the requirements of the Agreement, the ratio of the net sales value of Canadian vehicle production to Canadian vehicle sales after the Agreement must be equal to or greater than $\frac{A}{A + B}$, or $\frac{75}{100}$ if $\frac{A}{A + B} < \frac{75}{100}$.

Suppose the $ value of the Canadian market is denoted by:

1964	$(A + B)	Where imports are B, B_1,...B_4
1965	$(A + B_1+ a)	and growth in Canadian Production is designated by a,b,c,d.
1966	$(A + B_2+ a + b)	
1967	$(A + B_3+ a + b + c)	
1968	$(A + B_4+ a + b + c + d)	

The Agreement was in effect for only part of the 1965 model year, and 1966 was the first full year.

C.V.A. Requirements Under the Agreement

1964	$C	Between January 1, 1965, and July 31, 1968, an additional C.V.A. of $260 million has to be reached.[16]
1965	$C + $0.6(a)	
1966	$C + $0.6(a + b)	
1967	$C + $0.6(a + b + c)	
1968	$C + $0.6(a + b + c + d)	
1969	$C + $0.6(a + b + c + d + e)	
1970	$C + $0.6(a + b + c + d + e + f), etc.	

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[16] See Appendix B.

It should be noted that the additional C.V.A. in Canadian production is at the expense of those U.S. parts manufacturers which supply the Canadian finished vehicle manufacturers.

The significance of the model cannot be appreciated until statistics on the automotive industry are examined. It will be the task of the next two chapters to present the statistics for both the U.S. and the Canadian industries.

CHAPTER V

A STATISTICAL DESCRIPTION OF COSTS IN THE CANADIAN AND U.S. AUTOMOTIVE INDUSTRIES

The purpose of this chapter is to present the data on costs, prices, outputs, wages, employment, and productivity, for both the Canadian and the U.S. automotive industries.

This data is essential for the investigation of the past and present trends in the industries, and will be the basis for an appraisal of the chances of success of the 1965 Automotive Agreement. From the Canadian point of view, the success of the Agreement depends primarily upon the realization of supposedly unexploited economies of larger scale production, by means of which the resulting lower unit costs will increase the ability of the Canadian industry to compete with the U.S. industry.

The interpretation of the statistics on the industries will be carried out in Chapter VIII, although the interpretation can only be suggestive since information is lacking on the rate of technical change, relative factor prices, best practice productivity,[1] and the competitive structure in the industries.[2]

A. Output and Employment in the Canadian and U.S. Automotive Industries

The main source of information on the Canadian automotive

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[1] Best-practice productivity is crudely defined as the productivity of plants using the most modern equipment in the most efficient way.

[2] This approach is used in: W.E.G. Salter, Productivity and Technical Change (Cambridge: The University Press, 1960), p.103.

industry is the annual census of manufacturers.[3] Unfortunately, for the purposes of yearly comparison, only the year 1958 and later form a comparable time series. This arises from definitional changes in the census.

In the series of statistics in the annual census, total activity is broken down into manufacturing activity and non-manufacturing activity, but the user is warned that, for a coordinated series of statistics, total activity is most accurate since some firms cannot separate out manufacturing from non-manufacturing activity.[4] The statistics on purely manufacturing operations probably give the best indication of trends in production, although there is the possibility of year-to-year figures not being strictly comparable.

Non-manufacturing operations include administrative and office activities, sales and distribution activities. The statistics on production and related workers in manufacturing activity ' include labour involved in production and assembly activities, storing, handling, inspecting, packing, warehousing, maintenance, repair, janitorial and watchman services, and line supervisors engaged in

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3 Canada, Dominion Bureau of Statistics, Motor Vehicle Manufacturers, Annual Census of Manufactures (Ottawa: Queen's Printer); and,
Canada, Dominion Bureau of Statistics, Motor Vehicle Parts and Accessories Manufacturers, Annual Census of Manufactures (Ottawa: Queen's Printer).

4 Canada, Dominion Bureau of Statistics, Motor Vehicle Manufacturers, 1963, Annual Census of Manufactures (Ottawa: Queen's Printer, 1966), p.14.

similar work to that of the employees they supervise.'[5] The series on production and related workers does not include such non-manufacturing activities as construction in the manufacturing establishments.

The U.S. census of manufacturers[6] is based on the same establishment concept as the Canadian census, so that direct comparisons of trends in the industry in the two countries is possible.

In both countries, manufacturing value added figures are derived by subtracting the total cost of materials (including fuel, electricity) from the value of production, where the value of production is derived from the value of shipments by adjusting for changes in the value of inventories of finished goods and goods-in-process.

Data on cost of materials and value of shipments include extensive duplication resulting from the transfer of motor vehicle parts to establishments producing complete motor vehicles. The value of such shipments is duplicated in the total value of shipments. A corresponding duplication enters into the total cost of materials. The data for value added by manufacture, however, avoid this duplication.

The next three tables, Tables V-1, V-2, and V-3, show output and employment in the Canadian and U.S. automotive industries. The time series data are limited because of classification revisions.[7]

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[5] Ibid., pp.15-16.

[6] U.S. Department of Commerce, Bureau of the Census, Motor Vehicles and Equipment, Annual Census of Manufactures (Washington: U.S. Government Printing Office).

[7] Canadian census reorganized in 1960; U.S. census reorganized in 1957.

TABLE V-1

MAJOR STATISTICS OF THE CANADIAN MOTOR VEHICLE INDUSTRY

Basis: Revised Standard Industrial Classification and New Establishment Concept.

Year	Total Value of Shipments ($'000)	Manufacturing Value Added ($'000)	Total Employment (Number)	Manufacturing Employment (Number)
1958	836,422	250,327	25,711	18,604
1959	909,750	342,447	27,852	20,821
1960	969,759	337,119	27,081	19,835
1961	870,942	276,151	25,183	16,167
1962	1,179,982	372,793	27,001	17,997
1963	1,516,297	504,557	31,509	21,543

Source: Canada, Dominion Bureau of Statistics, Motor Vehicle Manufacturers, 1961, 1962, 1963, Annual Census of Manufactures (Ottawa: Queen's Printer).

It is seen that output and employment increased steadily from 1958, except for the recession in 1961. It will be shown in Chapter VI that Canadian sales and production picked up quickly after 1961, as competition from imports receded and the domestic market increased.

The size of the Canadian Parts industry is dependent to a large extent on the demand for Canadian-made parts by the Canadian finished vehicle manufacturers, but it also varies with demand for exports of parts and for replacement parts on the Canadian market. Thus, it would be expected that fluctuations in finished vehicle production would not have such a large impact on the parts' industry. Table V-2 shows that output of parts has increased steadily, in contrast to employment which was lower in 1960 than in 1959.

TABLE V-2

MAJOR STATISTICS OF THE CANADIAN MOTOR VEHICLE PARTS AND ACCESSORIES INDUSTRY

Basis: Revised Standard Industrial Classification and New Establishment Concept.

Year	Total Value of Shipments ($'000)	Manufacturing Value Added ($'000)	Total Employment (Number)	Manufacturing Employment (Number)
1958	259,559	119,201	15,446	11,988
1959	276,455	131,943	15,754	12,331
1960	288,080	132,594	15,531	11,956
1961	352,613	158,597	20,589	15,897
1962	436,260	196,668	22,203	17,508
1963	544,919	249,256	25,441	20,266

Source: Canada, Dominion Bureau of Statistics, Motor Vehicle Parts and Accessories Manufacturers, 1961-3, Annual Census of Manufactures (Ottawa: Queen's Printer)

In comparing Tables V-1 and V-2, it is noted that, even though manufacturing employment in recent years has been approximately the same in both industries, the values of shipments and manufacturing value added have been much larger in the finished vehicle industry. The larger value of shipments arises because the vehicle industry is more an assembler of parts than an integrated manufacturer. The characteristic of productivity, or value added per employee, is discussed for both industries in Section D of this chapter.

The relative sizes of the automotive industries in Canada and the U.S. are accentuated by the next table, Table V-3, which shows statistics for the U.S. industry.

TABLE V-3

MAJOR STATISTICS OF THE U.S. MOTOR VEHICLE AND EQUIPMENT INDUSTRY

Basis: Revised Standard Industrial Classification

Year	Total Value of Shipments ($'000,000)	Manufacturing Value Added ($'000,000)	Total Employment (Number)	Manufacturing Employment (Number)
1958	20,830	6,505	546,037	433,982
1959	26,713	8,915	599,912	489,423
1960	30,110	9,717	658,148	540,751
1961	25,848	8,542	569,619	460,339
1962	32,677	11,111	628,386	517,189
1963	36,181	12,346	649,926	535,842

Source: U.S. Department of Commerce, Bureau of the Census, Motor Vehicle and Equipment, 1963, Annual Census of Manufactures (Washington: U.S. Government Printing Office).

Note: Columns 1 and 2 are in $ U.S.

The year 1961 was a recession year for the U.S. industry, but in 1962 and 1963 activity increased appreciably as demand for the finished vehicle increased.

The raw statistics as shown by the previous three Tables are of little use except to show relative sizes in the industries. Growth rates are very indicative of conditions in the industries; accordingly Table V-4 shows growth rates as measured by annual changes in manufacturing value added. In the six years 1958 to 1963 these annual growth rates changed considerably in response to demand.

TABLE V-4

AUTOMOTIVE INDUSTRY GROWTH RATES , IN TERMS OF MANUFACTURING VALUE ADDED YEARLY

	1959	1960	1961	1962	1963
Canadian Motor Vehicle Industry	37%	-2%	-18%	37%	35%
Canadian Parts & Accessories Industry	11%	1%	20%	24%	27%
U.S. Motor Vehicle & Equipment Industry	37%	9%	-12%	30%	11%

Sources: Tables V-1, V-2, V-3

Table V-4 shows that yearly changes in growth rates have been higher than one third in some instances, indicating that there was a considerable flexibility in year-to-year operations. This demonstration of flexibility is important since the automotive industry is subject to cyclical demand for its products. This means that the industry has to be able to adapt to substantial output changes, both in an upward and in a downward direction.

B. Costs in the U.S. and Canadian Automotive Industries

The available public statistics on costs in the automotive industry are very limited. No data is available on particular firms; the aggregated industry figures are from the annual census of manufacturers, carried out for both Canadian and U.S. industries. The figures on costs are shown in Table V-5. These raw statistics are of little use for purposes of trend and comparison, and the unit costs are derived and shown in Table V-6, and Figure V-1.

Since the three industries examined do not have identical structures, it is not valid to make a direct comparison of relative sizes of unit costs, but these should be accepted as characteristics of each industry. From the point of view of this thesis it is more important to note the trend in costs.

The statistics of Table V - 5 show industry costs in the three categories, 'wages,' 'labour,' and 'materials.' Wages[9] refer to gross earnings of production and related workers engaged in purely manufacturing operations. Labour refers to gross wages and salaries paid to all categories of employees. These earnings include any bonuses and overtime payments. Cost of materials represents cost at the establishment of materials, supplies, components, fuel, and electricity, used in the production process.

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[9] For details on the components of 'cost' see, Canada, Dominion Bureau of Statistics, Motor Vehicle Manufacturers, 1963, Annual Census of Manufactures (Ottawa: Queen's Printer, 1966), p.17.

TABLE V-5

TOTAL COSTS IN THE CANADIAN AND U.S. INDUSTRIES

	1958	1959	1960	1961	1962	1963
Canadian Motor Vehicle Industry		$'000				
Wages	83,345	99,933	103,377	84,681	106,775	137,091
Labour	127,078	144,329	149,457	141,113	166,918	208,236
Materials	568,667	590,862	624,585	608,435	811,874	1,048,482
Gross Margin	140,677	174,559	195,717	121,394	201,190	259,579
Canadian Parts & Accessories Industry		$'000				
Wages	47,897	53,446	53,295	72,384	85,453	103,409
Labour	67,125	73,116	74,227	102,270	116,638	137,633
Materials	138,012	151,182	152,991	193,381	241,804	307,463
Gross Margin	54,422	52,157	60,862	56,962	77,818	99,823
U.S. Motor Vehicle & Equipment Industry		$'000,000				
Wages	2,374	3,019	3,378	2,882	3,484	3,890
Labour	3,169	3,915	4,320	3,780	4,465	4,947
Materials	14,189	17,914	20,313	17,199	21,574	23,889
Gross Margin	3,472	4,884	5,477	4,869	6,638	7,345

Source: See Tables V-1, V-2, and V-3.

Note: Canadian figures in $ Canadian and U.S. figures in $ U.S.
Wages refer to production workers only. Labour refers to total wages and salaries.
Gross Margin is obtained by subtracting cost of labour and materials from value of shipments of goods of own manufacture.
The measure of gross margin used here is gross of any depreciation allowances.

Unit costs for the industries are now shown in Table V - 6 on the next page. These are derived directly from total costs in Table V - 5.

TABLE V-6

UNIT COSTS IN THE CANADIAN AND U.S. INDUSTRIES

	1958	1959	1960	1961	1962	1963
Canadian Motor Vehicle Industry						
Unit wage cost	0.100	0.110	0.107	0.097	0.090	0.090
Unit labour cost	0.152	0.159	0.157	0.162	0.141	0.137
Unit materials cost	0.678	0.649	0.644	0.699	0.688	0.691
Unit gross margin	0.168	0.192	0.202	0.139	0.171	0.171
Canadian Parts and Accessories Industry						
Unit wage cost	0.185	0.193	0.185	0.205	0.196	0.190
Unit labour cost	0.259	0.264	0.258	0.290	0.267	0.253
Unit materials cost	0.532	0.547	0.531	0.548	0.554	0.564
Unit gross margin	0.210	0.189	0.211	0.162	0.178	0.183
U.S. Motor Vehicles & Equipment Industry						
Unit wage cost	0.113	0.113	0.112	0.111	0.107	0.108
Unit labour cost	0.152	0.147	0.143	0.146	0.137	0.137
Unit materials cost	0.681	0.671	0.675	0.665	0.660	0.660
Unit gross margin	0.167	0.182	0.182	0.189	0.203	0.203

Source: Derived from Table V-5.

The unit costs in the Table above show the proportion of each cost item in the total cost of production, the proportion being expressed as a decimal fraction. Gross margin, while not a cost in the strict sense, expresses the difference between factory revenue from shipments and total cost of labour and material combined. For ease of viewing the trends in unit costs are drawn in Figure V - 1 on the next page.

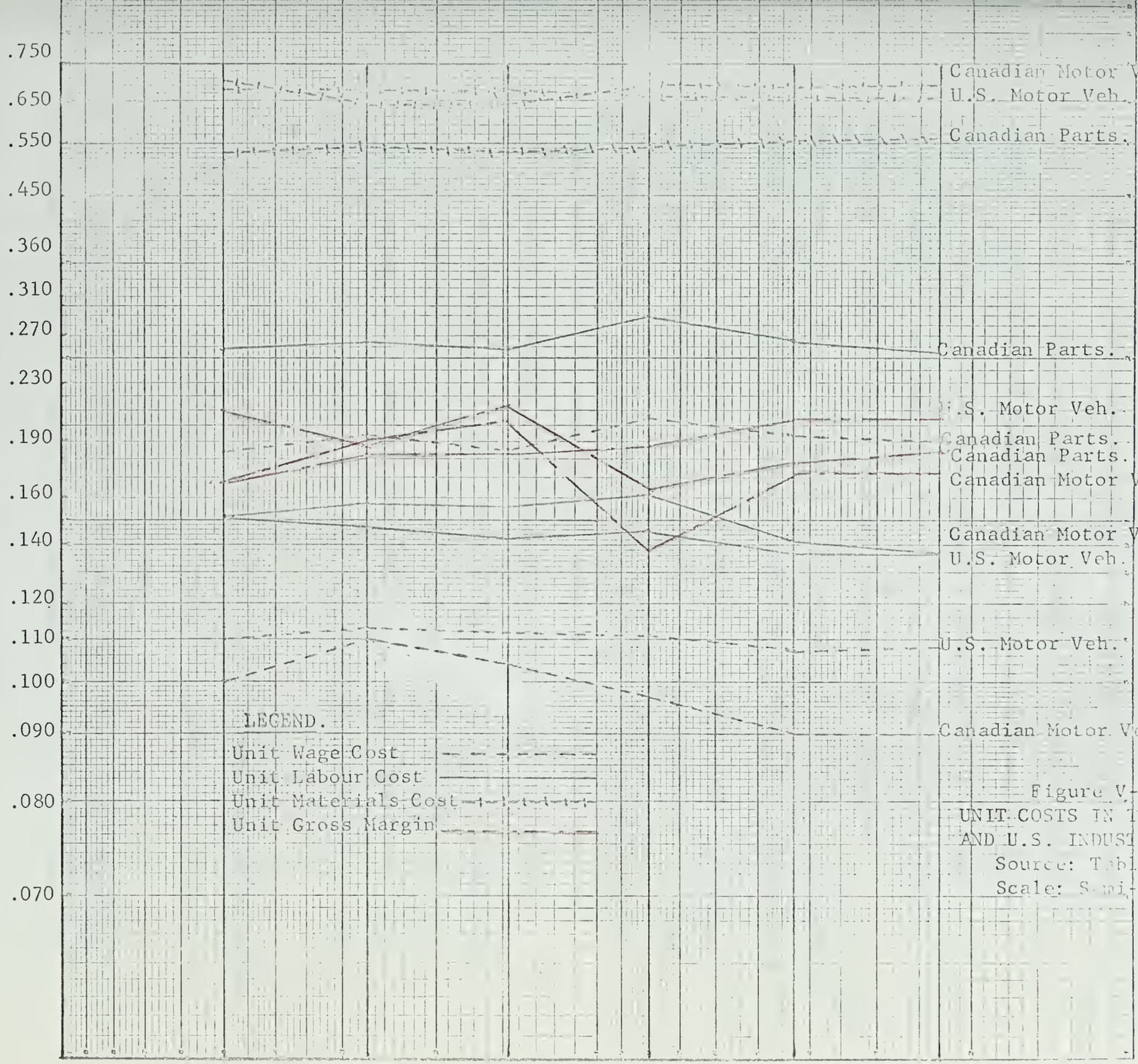


Figure V-1
UNIT COSTS IN THE CANADIAN AND U.S. INDUSTRIES.
Source: Table V-6.
Scale: Semi-Logarithm.

Figure V-1 is plotted on a semi-logarithmic scale in order to compare rates of change in unit cost among the three industries.

The variable costs in industry operations are labour and material cost. The gross margin is obtained by subtracting these variable costs from the selling price of factory shipment. It is seen from Figure V-1 that unit materials cost for the U.S. motor vehicle industry declined over the six year period, while the unit materials cost for both the Canadian motor vehicle and parts industries rose over this same period. Examination of the corresponding changes in unit labour cost shows that all three industries experienced a rise in unit labour costs in the low-output year of 1961. As far as the rates of decrease of unit labour costs after 1961 are concerned, it seems that the rate of decrease was greater for the Canadian motor industry and the U.S. motor vehicle industry than for the Canadian parts industry. Perhaps the most significant piece of information to be seen from the unit cost trends is that the unit gross margin for the U.S. industry has been rising at a steady rate, in contrast to the unit gross margins of the Canadian industries, which experienced large positive and negative changes in unit gross margins in the period 1958-63.

In order to see why these changes in unit gross margins occurred in the automotive industries it is necessary to examine the changes in unit labour costs and unit material costs.

Statistics on hours paid and hourly earnings in manufacturing are shown in Table V-7, and hourly earnings are plotted in Figure V-2.

TABLE V-7

HOURS PAID AND HOURLY EARNINGS IN THE CANADIAN AND U.S. INDUSTRIES

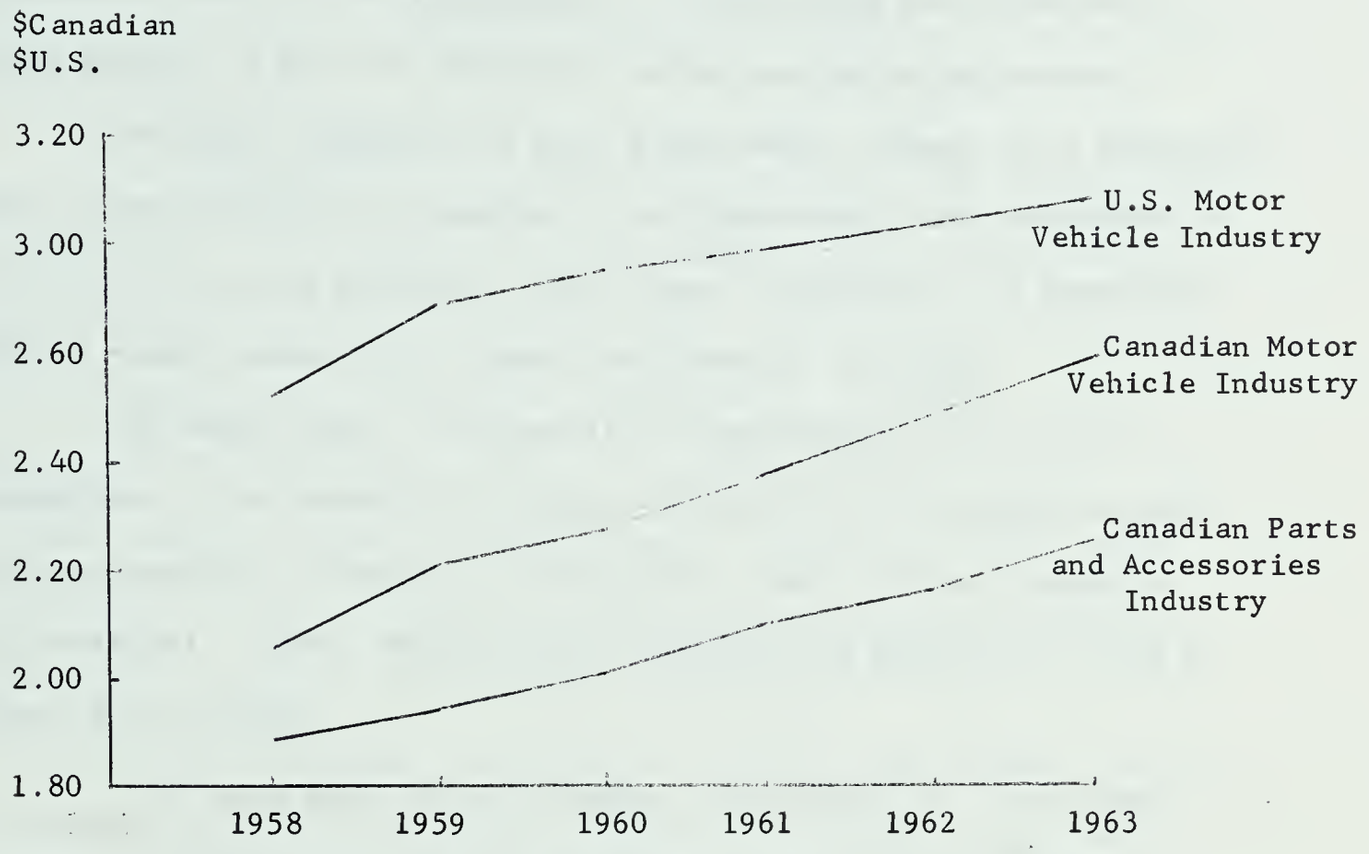
	1958	1959	1960	1961	1962	1963
Canadian Motor Vehicle Industry						
Hourly earnings per operative($)	2.05	2.20	2.26	2.34	2.47	2.59
Average hours per week per operative	38.3	40.1	40.3	41.3	43.0	44.0
Total yearly man-hours paid ('000)	41,340[E]	46,259[E]	44,085[E]	35,929	42,239	50,851
Canadian Parts & Accessories Industry						
Hourly earnings per operative($)	1.88	1.94	2.01	2.09	2.14	2.23
Average hours per week per operative	39.5	40.5	40.1	40.1	41.3	41.8
Total yearly man-hours paid ('000)	24,879[E]	25,625[E]	24,856[E]	33,058	38,060	43,928
U.S. Motor Vehicle & Equipment Industry						
Hourly earnings per operative ($)	2,55	2.71	2.81	2.86	2.99	3.10
Average hour per week per operative	39.7	41.1	41.0	40.1	42.7	42.8
Total yearly man-hours paid ('000'000)	858	1,058	1,132	945	1,110	1,193

Source: Canada, Dominion Bureau of Statistics, Review of Man-Hours and Hourly Earnings, 1945-64 (Ottawa, Queen's Printer), and as per Tables V-1, V-2, V-3.

Note: E. Yearly man-hours where non-existent, are estimated on the basis of the same % changes as in manufacturing employment. Canadian figures $ Canadian. U.S. figures $ U.S.

FIGURE V-2

HOURLY EARNINGS IN THE
CANADIAN AND U.S.
INDUSTRIES



Source: Table V-7.

There is a large inequality in hourly wage rates, but it is significant that the rates of increase over the six year period are approximately the same for each industry. Thus, there should be no change in relative unit wage costs due to changes in hourly earnings.

Unit wage costs and unit labour costs show declining trends for all three industries, although unit labour costs show peaks for the low output year of 1961. This leads one to deduce that, in periods of low output, hourly paid employment is reduced relatively more than total employment. This deduction is borne out by examination of Tables V-1, V-2, and V-3, which show how manufacturing employment and

total employment changed in the period 1958 - 63. Any future trends in unit labour costs will depend on the changing ratio of employees in manufacturing to total employees, and the wages and salaries of these groups, as well as labour use in the manufacturing process.

The other component of unit gross margin, namely unit materials' cost is more difficult to explain. Unit materials' cost is defined as the ratio of yearly materials' price times the quantity of materials used to yearly output price times the quantity of output.

One would expect the quantity of materials used to vary in proportion to the quantity of output, if each unit of output included the same quantity of materials from year to year. Thus, changes in unit materials' costs would vary as the ratio of materials' price to output price varied.

The large year to year changes, especially for the period 1960-61, in the values of unit materials' costs in the Canadian motor vehicle and the automotive parts industries could only be fully explained if there existed detailed information on materials' prices. In the absence of such data, however, it must be deduced that, either materials prices rose in relation to selling price of the finished product, or materials were bought on a long term contractual basis so that the industries were left with extra materials over and above that which was required for the low volume of production; or the rise in unit materials' cost was due to both these effects. Of course the preceding argument would be vitiated by changing technology in the industry, since this would likely lead to a change in factor proportions in the industry.

C. Industry Selling Price Indices

Wholesale sellingprice indices for the Canadian motor vehicle and parts industries, and for the U.S. motor vehicle industry, are shown in Table V-8. It has been arranged that the base year is 1958 for all industries.

The indices show the current composite price of shipments, as a percentage of the value for the year 1958, f.o.b. at the point of production and exclusive of excise taxes. The Canadian indices are weighted according to the value of shipments in 1953, and the U.S. index has 1954 as the base year. Obviously it is not valid to compare absolute values of these indices. Instead it is the time trend of each index which must be examined. Figure V-3 shows that the wholesale price index has risen appreciably for the products of both Canadian industries. In contrast, the U.S. price index, though irregular, fell to a low in 1963, and only increased a small amount in 1964 and 1965.

Since 1960 the unit gross margin in the U.S. industry has been greater than, and increasing faster than, the unit gross margin in the two Canadian industries. Also, since 1960, the wholesale prices of the Canadian products have been increasing at the same time as the wholesale price of the U.S. product was decreasing. There was an exception in 1965 when the Canadian motor vehicle industry reduced prices over the 1964 values, but this may have been due to the pressure of public opinion and is discussed in Part II.

An increasing unit gross margin is the result of a growing difference between total revenue and variable costs. Total revenue

TABLE V-8

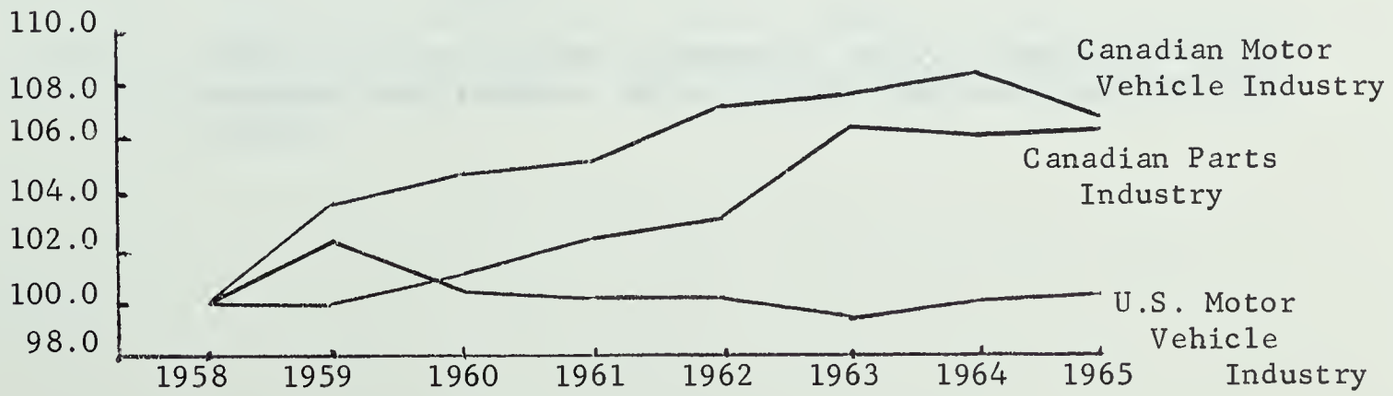
AUTOMOTIVE WHOLESALE PRICE INDICES
1958 = 100

	1958	1959	1960	1961	1962	1963	1964	1965
Canadian Motor Vehicle Industry	100.0	103.8	104.8	105.2	107.3	107.9	108.3	107.2
Canadian Parts & Accessories Industry	100.0	100.0	101.2	102.5	103.6	106.3	106.1	106.7
U.S. Motor Vehicle & Equipment Industry	100.0	102.2	100.7	100.4	100.5	99.7	100.2	100.4

Sources: Canada, Dominion Bureau of Statistics, Canadian Statistical Review (Ottawa: Queen's Printer); and,
U.S. Department of Commerce, Survey of Current Business (Washington: U.S. Government Printing Office).

FIGURE V-3

AUTOMOTIVE WHOLESALE PRICE INDICES
(1958 = 100)



Source: Table V-8.

is a function of output volume and output price, and one would expect that material's costs also varied to some extent with quantity demanded. Thus, price and unit gross margin are interdependent, and are not determined independently. The relation between price and total revenue depends on the elasticity of demand for the product.[8]

The fact that the U.S. automotive industry was decreasing prices, at the same time as labour and material's costs were rising, and was still able to increase unit gross margins, suggests that demand

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[8]
a. Gross Margin = (Price of Output)(Quantity of Output) - Labour Cost - Material Cost

b. Suppose revenue = p.q, and price = p, and quantity q is taken. Suppose further that price is reduced to $(p-\Delta p)$ and that the quantity taken increases to $(q+\Delta q)$. Then, the extra revenue resulting from the price decrease

$$= (p-\Delta p)(q+\Delta q) - p.q$$

$$= p.\Delta q - q.\Delta p \qquad \text{if second-order quantities are ignored.}$$

$$= \frac{\Delta q.p}{q.\Delta p} . q.\Delta p - q.\Delta p$$

$$= E.q.\Delta p - q.\Delta p = q.\Delta p(E-1).$$

Where E = Elasticity of Demand for the product

$$= \frac{\Delta q.p}{q.\Delta p}$$

Thus, for elasticities in excess of unity, a price reduction provides more revenue, while a price rise would provide less revenue.

for the products was so elastic that total revenue increased faster than the increase in labour and materials costs.

In both the Canadian industries price increased 1959-63, while unit gross margins increased 1958-60, decreased 1960-61, and had increased by 1963 back to the 1958 levels. Since the price increases were apparently accompanied by revenue increases one may deduce that elasticity of demand for both Canadian industries was less than unity.

The above deductions for the elasticities of the demand curves for automotive products in Canada and the U.S. imply 'dynamic' demand curves, which take into account year-to-year changes in consumer tastes. The derivation of the 'point' demand elasticity gives this characteristic at a single point on the demand curve and not an average value over a section of the demand curve.[10]

In all probability, the industry demand curve is not a straight line, but if the automotive industry has some idea of the demand curve facing it,[11] the 'point' and the 'arc' measures are approximately equal

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[10] The 'arc' measure of demand elasticity assumes that quantity taken increases from q to Q in response to a price decrease from p to P. Then $E = \frac{Q - q}{Q + q} \times \frac{p + P}{p - P}$
In contrast to the measure expressed by point elasticity, arc elasticity requires a base period price and quantity.

[11] The Research Department, Bank of Canada, Ottawa, is currently attempting to formulate the demand function for cars in Canada.

for small price and quantity changes. In this way, some idea of the future revenue to be expected from a future price change may be estimated. An estimate of future revenue accruing in response to future price changes is important from the viewpoint of the 1965 Automotive Agreement, since one of the objectives of this Agreement is the narrowing of the price differential between Canadian and U.S. cars.[12]

D. Productivity Measures

Productivity measures are of prime importance in an industry study, and a number of interpretations are possible. The two most common measures are the ratio of yearly manufacturing value added to yearly manufacturing man-hours paid, and the ratio of yearly value of shipments to total yearly employment. These measures of productivity show different aspects of the production process, but for an overall view of the industry, the ratio of value of shipments to total employment is more apt than the measure based solely on manufacturing activity.

There are numerous difficulties and limitations in measurements based on published statistics as compared with engineering data.[13] Productivity measurements are usually based upon the ratio of production to labour. This should ideally be in terms of physical units, but for reasons of complexity monetary values must be used. For comparisons over time some sort of time series in terms of constant prices is also

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[12] See Chapter VIII, Section D.

[13] See, for instance, Jean Fourastié, Productivity, Prices and Wages (Paris: O.E.C.D., 1957).

required. In addition, employment statistics do not always cover the same field as production statistics. Thus, it may be possible to know the number of motor vehicles produced, but not the total number of man-hours required to produce them. While the investigator knows the exact size of the labour force and the number of man-hours worked in factories producing motor vehicles, data is not available for the total number of man-hours required for the production of such items as materials consumed in the motor industry, the power consumed, and machine tools used. Therefore, since production statistics record finished products and employment statistics relate to occupational groups, the ratio of production to employment is uncertain.

A further difficulty arises through the inability to distinguish between progress due to improved production techniques and that attributable to changes in economic structure. For instance, if a firm changes the structure of its production and produces a slightly differing product which takes fewer man-hours, then it might appear that productivity had increased, whereas productivity in fact does not necessarily have to increase in this case.

Productivity measures are shown in Table V-9, and graphs of productivity against time are plotted in Figures V-4 and V-5. It is not valid to compare absolute values of productivity since the industries have different structures. The productivity of each industry is a characteristic of that industry, and the important consideration is the relative rates of change in productivity between the industries.

TABLE V-9

PRODUCTIVITY MEASURES IN THE CANADIAN AND U.S. INDUSTRIES

	1958	1959	1960	1961	1962	1963
Canadian Motor Vehicle Industry						
Productivity	6.06[E]	7.40[E]	7.65[E]	7.69	8.83	9.92
Output per Head($)	32,531	32,664	35,810	34,585	43,701	48,123
Canadian Parts & Accessories Industry						
Productivity	4.79[E]	5.15[E]	5.33[E]	4.80	5.17	5.67
Output per Head($)	16,804	17,548	18,549	17,126	19,649	21,419
U.S. Motor Vehicle & Equipment Industry						
Productivity	7.58	8.43	8.59	9.04	10.01	10.35
Output per Head($)	38,148	44,528	45,750	45,422	52,002	55,669

Sources: Derived from Tables V-1, V-2, V-3 and V-7.

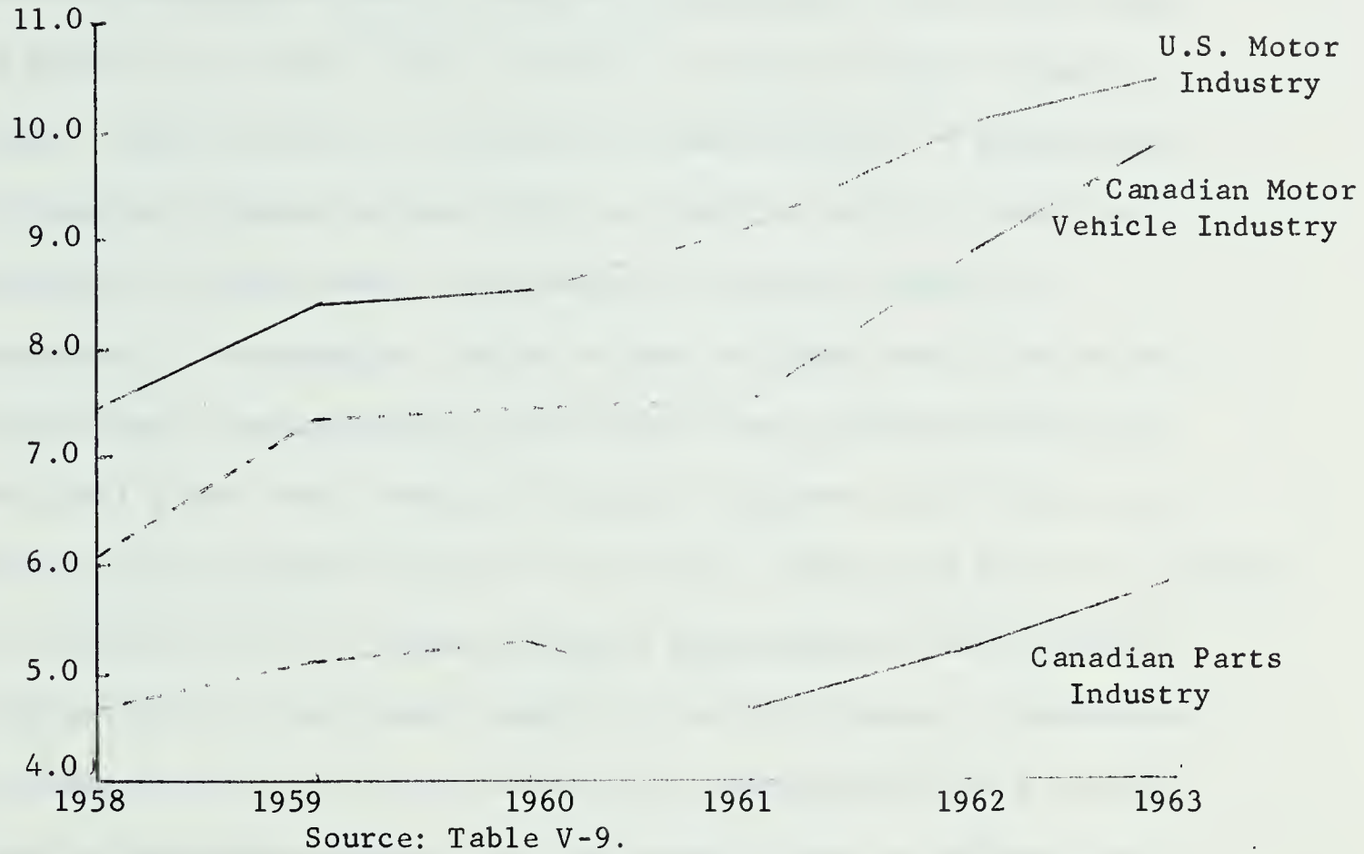
Note: Output per head is defined as the ratio of total value of shipments to total employment. Productivity is defined as the ratio of yearly manufacturing value added to yearly man-hours paid.

E. Productivity measure, as based on estimated yearly man-hours, in Table V-7, is calculated using the same annual percentage changes as in manufacturing employment.

Canadian values in $ Canadian. U.S. values in $ U.S.

Figure V-4

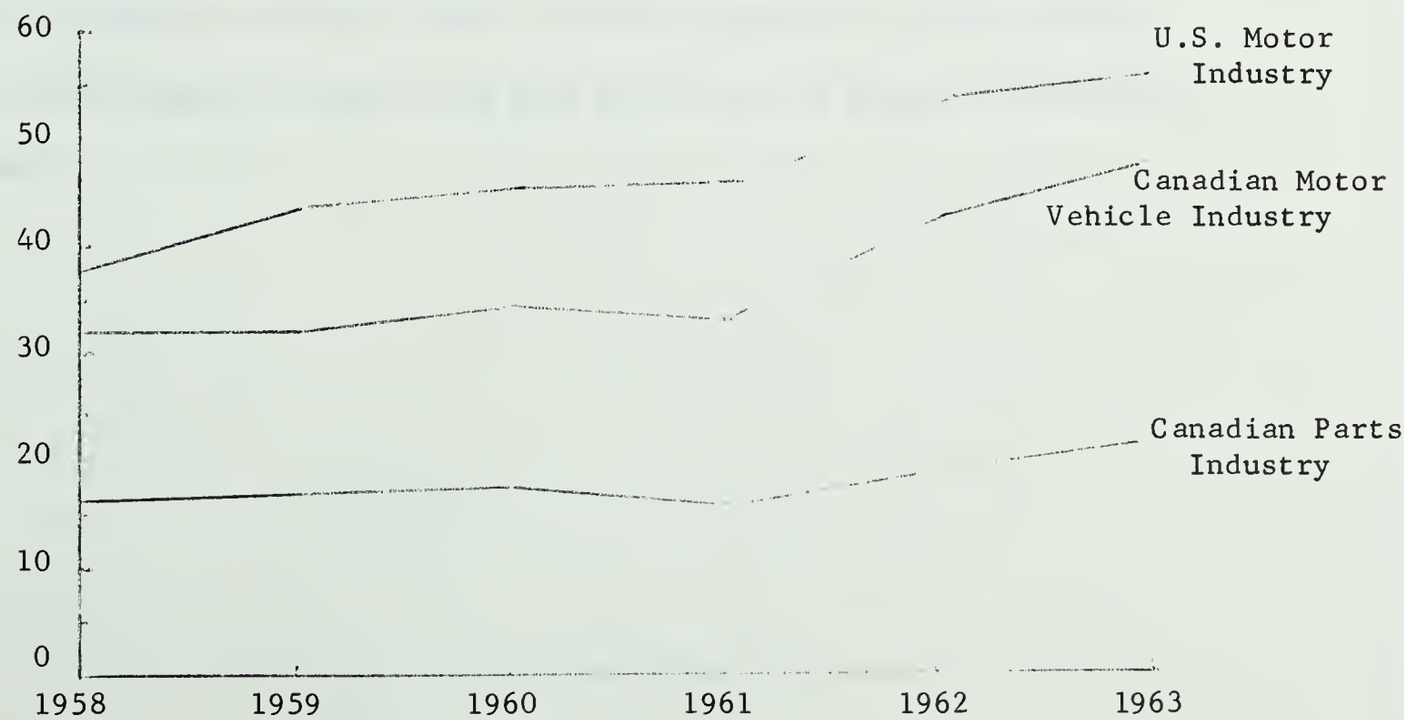
COMPARISONS OF LABOUR PRODUCTIVITY
($ per man-hour)



Source: Table V-9.

Figure V-5

COMPARISONS OF OUTPUT PER HEAD
($'000 per head per year)



Source: Table V-9.

Note: In the above Tables, data is in $Canadian and $U.S.

Figures V-4 and V-5 show that all three industries experienced a trend towards higher productivity, in the period 1958-63, both in "overall operations" and in "manufacturing only". The larger values of productivity seem to have occurred at times of larger industry output, and vice versa. This year-to-year movement of productivity in phase with output (productivity is itself a ratio of output to employment) occurs mainly because of the relative rigidity of employment. For example, Tables V-1 and V-7 show that, from 1960-61, value added in manufacturing fell 18 per cent, while man-hours paid only fell 9 per cent; and total value of shipments fell 10 per cent, while total employment fell only 7 per cent. Thus, the short-run changes in productivity are at least partially explainable by the relative inflexibility of employment compared to output changes. Superimposed on these apparent short-run productivity changes would be a long-run trend to increased productivity, for example, due to introduction of labour-saving technology.

Thus, although it can be said that productivity appears to have increased in recent years, the real reasons for this increase are undetermined. Engineering data would have to supply the complete answer.

CHAPTER VI

A STATISTICAL DESCRIPTION OF CANADIAN AND U.S. AUTOMOBILE PRODUCTION, AND CANADIAN AUTOMOTIVE IMPORTS AND EXPORTS

Whereas the last chapter was concerned with costs and the production processes in the automotive industry, this chapter aims to describe the patterns of production, exports and imports. From the point of view of the Canada - U.S. Automotive Agreement, it is important to know these patterns since the plan itself envisages changes in these patterns.

A. Finished Vehicle Production in Canada and the U.S.

The nature of recent Canadian finished vehicle production is shown in Table VI - 1 and in Figure VI - 1. The year 1956 was a high point in both Canadian car and truck production, with a subsequent upturn beginning in 1958. It was not until after 1961, however, that the present great upsurge in production gained momentum.

The recession in the automobile industry from 1958 to 1961 seems to have coincided with the general recession in the Canadian economy, through sales of vehicles would also have to be examined in this connection. The fall in the value of the Canadian dollar in 1962 no doubt encouraged exports, in the same manner that the high value of the dollar previous to 1962 made imports attractive. Part of the decline in Canadian production before 1962 may have been due to a high volume of imports. Sales and import statistics are examined later in this chapter. In any event, the sharp increase in production after 1961, of both passenger and commercial vehicles,

TABLE VI-1

FACTORY SHIPMENTS OF FINISHED VEHICLES
(Numbers of Vehicles)

Period	Passenger Cars			Motor Trucks and Buses			Total Vehicles		
	Canadian Shipments	For Domestic Use	For Export	Canadian Shipments	For Domestic Use	For Export	Canadian Shipments	For Domestic Use	For Export
1951	281,245	-	-	132,527	-	-	413,772	-	-
1952	283,534	-	-	150,176	-	-	433,710	-	-
1953	360,385	-	-	120,574	-	-	480,959	-	-
1954	287,191	-	-	69,892	-	-	357,083	-	-
1955	375,028	-	-	78,569	-	-	453,597	-	-
1956	374,312	349,809	24,503	93,552	85,094	8,548	467,864	434,903	32,961
1957	340,016	318,416	21,600	71,868	64,857	7,011	411,884	383,273	28,611
1958	298,349	280,677	17,672	61,428	55,908	5,528	359,777	336,585	23,200
1959	300,616	285,841	14,775	67,441	63,429	4,012	368,057	349,270	18,787
1960	326,273	307,499	18,774	70,670	66,293	4,377	396,943	373,792	23,151
1961	321,927	312,599	9,328	63,799	60,332	3,467	385,726	372,931	12,795
1962	426,085	412,120	13,965	82,049	78,094	3,955	508,134	490,214	17,920
1963	530,160	513,785	16,375	98,427	93,912	4,515	628,587	607,697	20,890
1964	559,392	521,785	37,607	109,126	101,902	7,224	668,518	623,687	44,831
1965	698,298	636,360	61,938	142,706	119,759	22,947	841,004	756,119	84,885

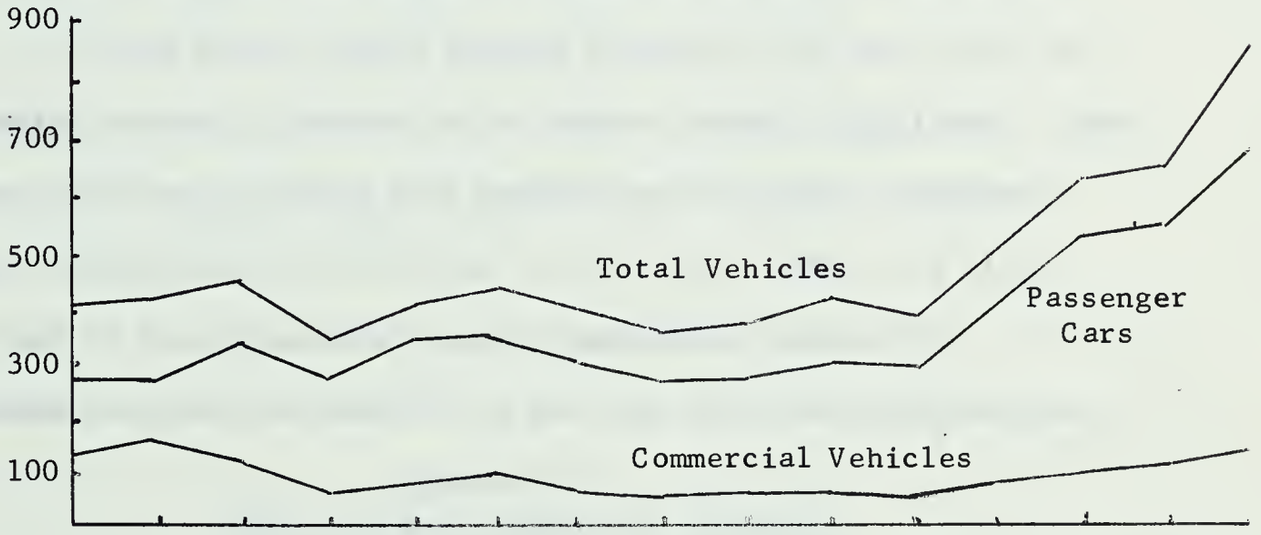
Sources: Canada, Dominion Bureau of Statistics, Motor Vehicle Manufacturers,1963, Annual Census of Manufactures (Ottawa: Queen's Printer, 1966), and, Motor Vehicle Manufacturers' Association, Facts and Figures of the Automotive Industry, 1963,1964,1965, (Toronto).

Note: When the production statistics published by the above two sources are examined it is noted that there is some discrepancy between the figures from each source. This arises because the Census of Manufactures covers all production in Canada. The statistics from the Motor Vehicle Manufacturers' Association, however, only include the output from those firms which belong to the Association. The discrepancy is very small, since all the large, and most of the small,firms in Canada are members of the Association.

is astounding in view of the past history of the industry which seemed to rule that there would never be more than two consecutive years of increased sales. It is significant to note from Figure VI-1 that the increase in vehicle output in recent years has been mainly the result of an increase in passenger car production, although the increase in commercial vehicle production has also been substantial.

Figure VI-1

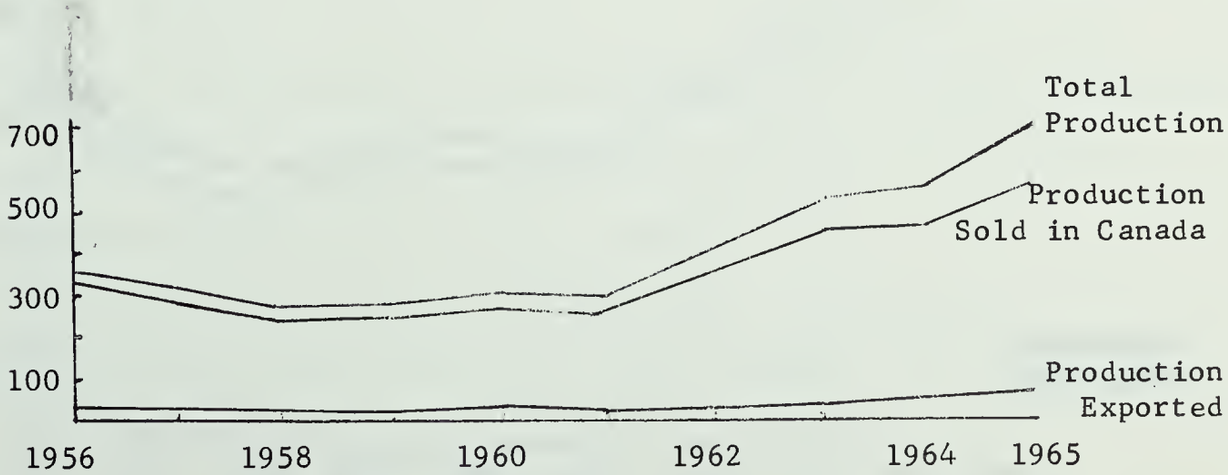
CANADIAN VEHICLE PRODUCTION TRENDS
('000 of units)



Source: Table VI-1.

Figure VI-2

PASSENGER CAR PRODUCTION: EXPORTED AND SOLD IN CANADA ('000 of units)



Source: Table VI-1

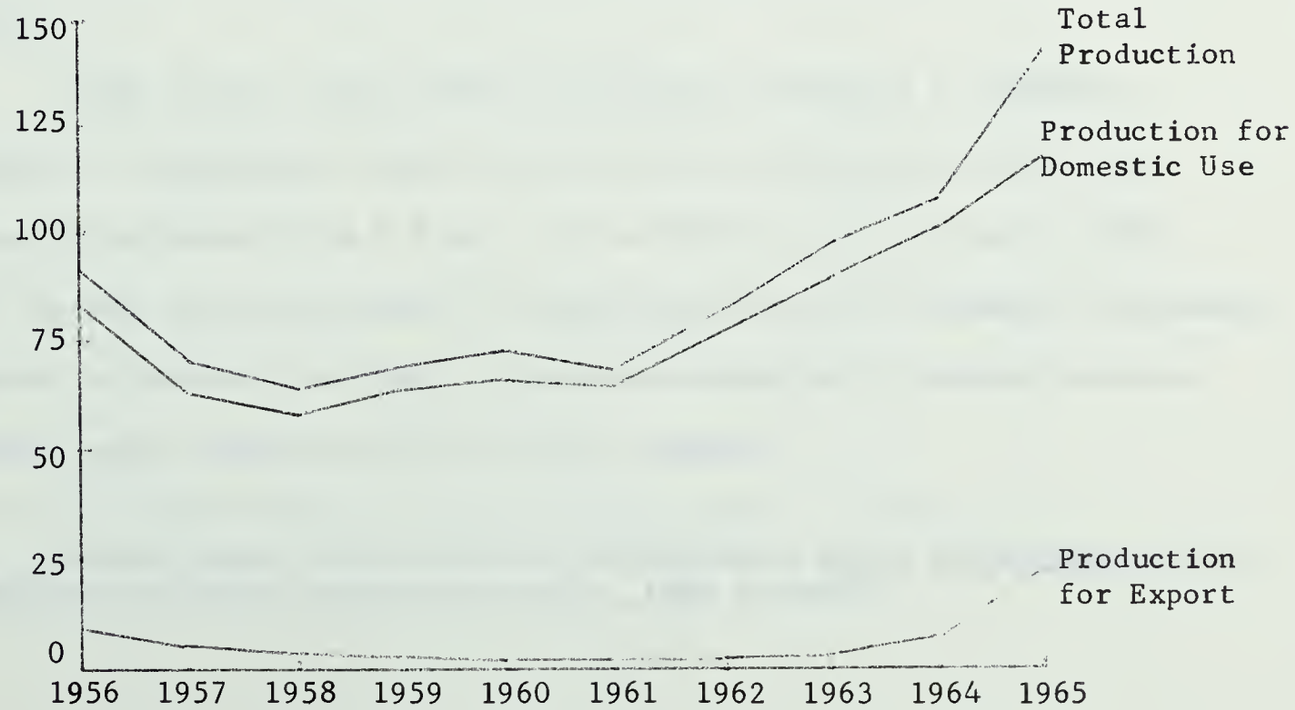


Figures VI-2 and VI-3 show that, until 1962, exports of both passenger cars and commercial vehicles were nearly constant from year to year, even though there were marked fluctuations in production for domestic use. The market for exported vehicles moved independently of the market for domestically produced vehicles, and the Canadian market was in a decline from 1958 to 1961. In fact, in the next section, Table VI-1 and Figure VI-4 show that there was only a slowly rising demand for North-American-type cars in the period 1958-61, but imported cars enjoyed a boom in sales in this period.

In view of the tariff changes of 1962, 1963, and 1965, the increasing volume of production for export is most significant. Both Figures VI-2 and VI-3 show that production for export increased sharply, particularly after 1963. By the end of 1965, the first full year of the Automotive Products Agreement, exports of passenger cars had increased by 65 per cent over the previous year,

FIGURE VI-3

TRUCK AND BUS PRODUCTION, EXPORTED AND SOLD DOMESTICALLY ('000 units)



Source: Table VI-1.

TABLE VI-2

TOTAL NORTH AMERICAN AUTOMOBILE PRODUCTION
('000 of units)

Year	U.S.	Canadian	Total	%U.S.	%Canadian
1958	5,108	855	5,963	85.6	14.4
1959	6,724	369	7,093	94.8	5.2
1960	7,905	396	8,301	95.2	4.8
1961	6,648	390	7,038	94.4	5.6
1962	8,197	509	8,706	94.2	5.8
1963	9,109	633	9,742	93.5	6.5
1964	9,308	668	9,976	93.3	6.7
1965	11,135	850	11,988	92.9	7.1

Source: _____, L'Argus de l'Automobile, Supplément au numéro 1946 (Paris: May 26, 1966), p.5.

and exports of commercial vehicles more than tripled. The record for the first quarter of 1966, compared to the first quarter of 1965, is impressive: production of passenger cars rose by 18 per cent, and of commercial vehicles by 35 per cent.[1] Exports of both cars and trucks nearly tripled in these periods.

With regard to the share of Canadian production in combined Canada-U.S. production, Table VI-2 shows that the Canadian share has gradually increased from 4.8 per cent in 1960 to 7.1 per cent in 1965. This already increasing share is significant since the Automotive Agreement intends to increase the share to Canadian production by making Canadian industry more competitive with the U.S. industry.

[1] Motor Vehicle Manufacturers Association, Facts and Figures of the Automotive Industry, Monthly Bulletins, 1966 (Toronto).

B. Sales of Finished Vehicles in Canada

Since the end of 1961 sales of both passenger cars and commercial vehicles have risen sharply.[2] It is surprising to see that, during the period 1956 to 1961, sales of North-American-type cars declined while sales of imported cars of non-North-American-style rose sharply. The decline in imports started in 1961 and continued through to 1963. The pegging of the Canadian dollar, after a period of floating exchange rate, was effected in May, 1962,[3] and the concomitant fall in the value of the dollar certainly contributed to the decrease in sales in Canada of imported foreign-style cars. Since 1963 these imports have been rising again, in step with, but at a lower rate than total sales in Canada.

As far as truck sales are concerned, the market has steadily expanded since the end of 1961, but imports of trucks from other than the U.S. have steadily declined from a proportion of 10 per cent of the market in 1959 to 1.7 per cent in 1965.

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2 See Figures VI-4 and VI-5.

3 Paul Wonnacott, The Canadian Dollar, 1948-62, (Toronto: University Press, 1965) p.204.

TABLE VI-3

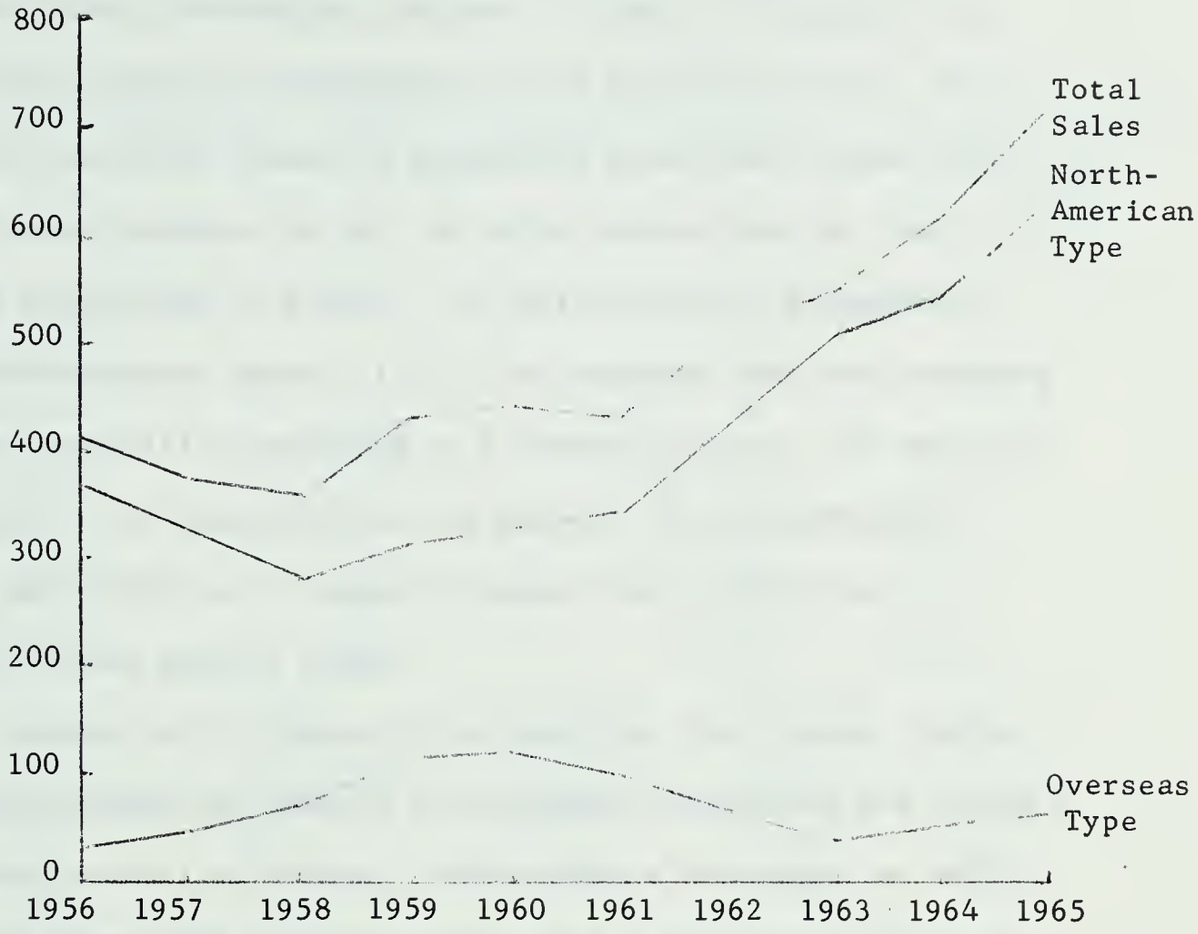
NEW MOTOR VEHICLE SALES IN CANADA
(Numbers of Vehicles)

Period	Passenger Cars			Motor Trucks and Buses			Total
	North American Type	Overseas Manufactured Type	Total	North American Type	Overseas Manufactured Type	Total	Total Vehicles
1956	374,064	34,169	408,233	87,843	3,845	91,688	499,921
1957	332,590	49,433	382,023	71,909	4,367	76,276	458,299
1958	299,557	77,166	376,723	61,349	6,697	68,046	444,769
1959	310,920	114,118	425,038	69,366	8,222	77,588	502,626
1960	321,804	125,967	447,771	68,324	7,093	75,417	523,188
1961	336,122	101,197	437,319	68,149	6,011	74,160	511,479
1962	427,127	75,438	502,565	68,674	3,971	82,645	585,210
1963	506,311	51,476	557,787	94,323	2,879	97,202	654,989
1964	549,740	65,801	615,541	106,599	2,354	108,953	724,494
1965	633,518	75,124	708,642	120,136	2,067	122,203	830,845

Sources: Canada, Dominion Bureau of Statistics, New Motor Vehicle Sales(Ottawa; Queen's Printer); and, Motor Vehicle Manufacturers' Association, Facts and Figures of the Automotive Industry,1963, 1964, 1965, (Toronto).

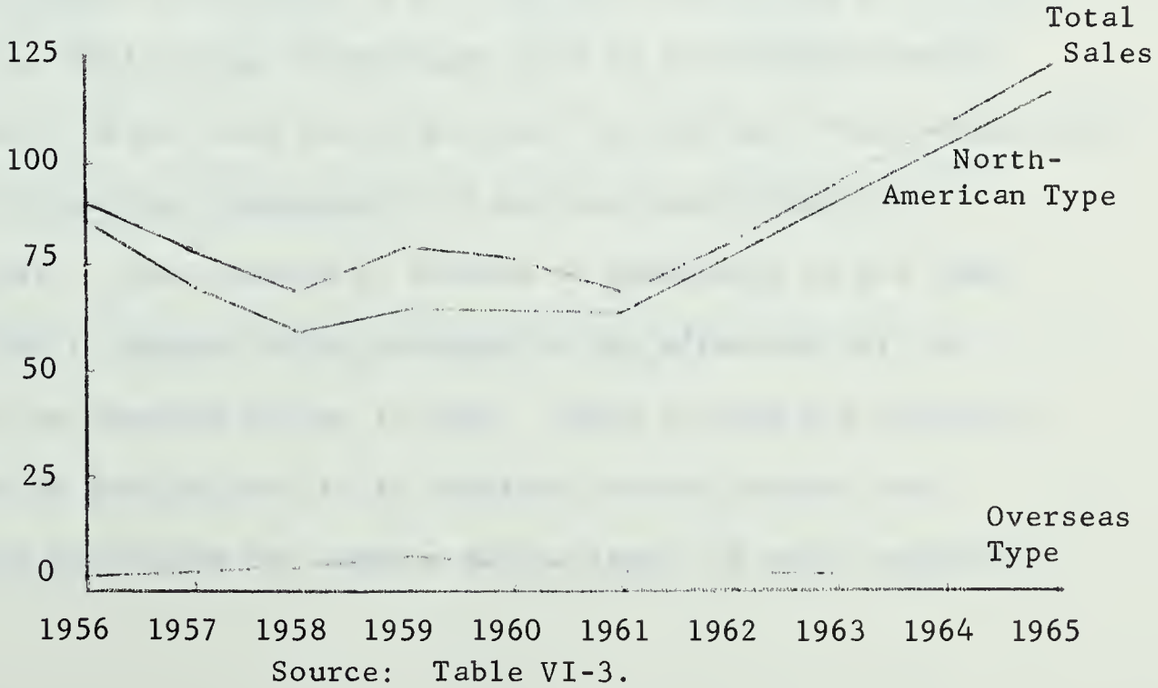
Note: There is a slight discrepancy between the statistics from the two sources. See the explanation as per Table VI-1.

Figure VI-4
NEW CAR SALES IN CANADA('000 units)



Source: Table VI-3.

Figure VI-5
NEW TRUCK SALES IN CANADA('000 units)



Source: Table VI-3.

When examining statistics on sales it should be remembered that the primary restraining influence on new car buying is the size of the income at the disposal of the potential buyer. Any growth in sales will depend on population growth and trends into higher income brackets, as well as other factors such as the changing average age of buyers. In addition, since automobiles are durable consumer goods, it is to be expected that the foregoing considerations will be modified by a cyclical factor. At any rate this has been the experience in the history of the automobile industry and there is no reason to expect that it will not continue in some form or other.

Turning now to imports of automobiles into Canada, Tables VI-4 and VI-5 show the numbers of passenger automobiles and trucks imported, by country of origin. Total imports are shown, as well as imports from those countries which have a significant share of total imports.

Imports may always be expected to change in phase with domestic sales, since both are determined by disposable incomes of consumers. While sales of passenger cars on the Canadian market increased by 10 per cent and 15 per cent in 1964 and 1965, respectively, imports of vehicles increased by 55 per cent and 48 per cent respectively. This upsurge in imports is remarkable in the light of the drop in imports which accompanied the effective fall in value of the Canadian dollar in 1962. Since no data are available on prices of foreign cars it is difficult to say whether the increasing preference for imports is the result of price reduction

TABLE VI-4

PASSENGER CAR IMPORTS BY COUNTRY (Numbers of Vehicles)

Year	Total Passenger Car Imports	Annual % Change in Car Imports	Imports From U.S.	Proportion of U.S. Passenger Cars in Total Imports
1956	76,200	-	-	-
1957	70,796	-7.1	-	-
1958	104,195	47.2	-	-
1959	153,932	47.7	-	-
1960	170,653	10.9	27,841	16.3%
1961	108,865	-36.2	16,574	15.5%
1962	94,655	-13.1	17,878	18.9%
1963	59,634	-36.9	7,372	12.4%
1964	92,490	55.1	15,138	16.4%
1965	136,496	47.6	46,408	34.0%

Year	Imports From U.K.	Imports From W. Germany	Imports From France	Imports From Sweden	Imports From Japan
1960	92,831	37,427	9,463	1,538	-
1961	45,758	34,815	7,476	1,597	-
1962	37,089	32,256	4,955	1,657	-
1963	15,046	30,403	3,060	3,104	-
1964	33,884	34,721	4,566	2,753	993
1965	32,492	39,137	8,099	3,612	5,548

Source: Canada, Dominion Bureau of Statistics, Trade of Canada: Imports by Commodities (Ottawa: Queen's Printer).

Note: Import figures are obtained from the Customs Import Declarations which accompany all imports into Canada.

TABLE VI - 5

COMMERCIAL VEHICLE IMPORTS BY COUNTRY (Numbers of Vehicles)

Year	Total Imports	Annual % Change in Total Imports	Imports From U.S.	Proportion of U.S. Imports in Total
1960	11,907	-	5,843	39,1%
1961	12,304	3.3	7,540	61.3%
1962	8,397	-31.8	5,622	67.0%
1963	6,462	-23.1	4,428	68.5%
1964	4,851	-25.0	3,331	68.7%
1965	8,884	83.1	7,547	85.0%

Year	Imports From U.K.	Imports From W. Germany	Imports From France	Imports From Sweden	Imports From Japan
1960	3,290	2,343	320	5	-
1961	2,629	1,898	152	25	-
1962	1,073	1,472	97	21	-
1963	448	1,452	26	54	-
1964	306	980	68	5	155
1965	404	475	51	0	386

Source: Canada, Dominion Bureau of Statistics, Trade of Canada: Imports by Commodities (Ottawa: Queen's Printer)

Note: As per Table VI-4.

or of changes in consumer tastes. Whatever the reason for the large number of imports, the Canadian automobile sells domestically in competition with imported automobiles. The following table, Table VI-6, shows to what extent imports are a threat to domestic production.

TABLE VI-6

RATIOS OF NUMBERS OF PASSENGER VEHICLES IMPORTED TO NUMBERS OF PASSENGER VEHICLES SOLD IN CANADA

	1960	1961	1962	1963	1964	1965
World Imports	38.1%	24.9%	18.8%	10.7%	15.0%	19.2%
Imports from U.S.	6.2%	3.8%	3.6%	1.3%	2.5%	6.5%
Imports from other than U.S.	31.9%	21.1%	15.2%	9.4%	12.5%	12.7%

Source: Table VI-4

The figures in Table VI-6 showing the proportion of imports in Canadian sales, tend to overstate the degree of competition from imports. This is because some automobile producers in Canada import certain types of car from their own plants in other countries, to satisfy a specific type of demand in Canada. For instance, General Motors of Canada does not produce Cadillacs in Canada, but buys them from its parent company in the U.S. and distributes them via established G.M. dealers in Canada. This type of car is certainly not in competition with cheaper types of car such as Chevrolets or Pontiacs, which are made by the same company in Canada.

The most significant fact about the statistics on passenger car importation is that, before 1964, the U.S. only exported to Canada about one fifth as many cars as did the rest of the world. By actual numbers, the cars imported from the U.S. followed the trends of sales in Canada. In 1965, however, the first full year of the Automotive Agreement, imports from the U.S. not only tripled in number, but accounted for just over one third of all car imports.

Of course, one of the objectives of the Automotive Agreement, namely the rationalization of North American production, would be evidenced by increased importations of vehicles, but it is by no means clear that this surge in imports was the result of the Automotive Agreement. The first year of the Agreement seems too early for production processes to have been rationalized far enough to drastically alter vehicle trade. It seems more likely that the increase in imports was part of the increased domestic demand for automobiles.

Most notable among the imports from other countries is the decline, since 1960, of importation of cars from the U.K., and the rapid rise in imports from Sweden and Japan, as shown in Table VI-4.

European imports of finished vehicles into Canada began in a serious way in 1949 when British manufacturers set out to gain a foothold in the Canadian market.[4] The gain in imported vehicle sales in the late 1950's was helped by G.M. and Ford of Canada who imported from their European affiliates. In addition, the mild recession in the Canadian economy in the late 1950's changed consumer tastes in favour of smaller imported cars. Imports of overseas manufactured cars fell off after 1959 for three reasons: first, the previously mentioned pegging of the Canadian exchange rate, in 1962, which was effectively a devaluation; second, the introduction of the North American compact car; and, third, the imposition of a tariff surcharge on imported vehicles. The surcharge was imposed by the Canadian government on all imported vehicles in order to affect the foreign trade deficit. The surcharge was 10 per cent ad valorem.[5] One may have expected that overseas imports would have blossomed again as North American type cars became larger and plusher, but this has not happened. It seems that the consumer buying trend is towards North American style cars. Although the import surcharge no longer exists, it must be concluded that the

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[4] J.P. Robidoux, "Outlook for the European Automotive Market in Canada," Business Quarterly, XXVIII (Summer, 1963), 61.

[5] Ibid., p.63

European automobile does not seem to have a very optimistic future, at least in a direct comparison with the large increase in U.S. imports in 1965. This is a very short-sighted view, however, and could easily be shown to be less accurate in a recession or simply by a change in consumer tastes.

C. Canadian Automotive Parts Production and Imports

Since the purpose of this thesis is to provide a basis for understanding possible changes under the 1965 Automotive Agreement, Table VI-7 is shown to demonstrate the wide variety of products from different industries, which may be loosely labelled 'automotive products.' Table VI-8 presents a detailed breakdown of the variety of products produced by the Motor Vehicle Parts and Accessories Manufacturers. Commodity reclassifications, unfortunately, limit the number of years for which statistics are comparable.

The greatest problem, in analysing the patterns of production and imports of automotive parts, is that parts are destined either for installation in finished vehicles, in which case the part is defined as 'original equipment', or the part is destined for the replacement market (also called the automotive aftermarket). The production and import statistics provided by the Dominion Bureau of Statistics do not separate the parts by destination. In fact no detailed study has yet been made in Canada to determine the destination of domestically produced or imported parts, although the structure of supply of parts to the automotive aftermarket was investigated in 1964.[6]

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[6] Emil J. Bonkoff. A Report on the Changed Automotive Aftermarket in Canada, (Montreal: Dominion Brake Shoe Company, June, 1964).

TABLE VI-7

TOTAL AUTOMOTIVE SHIPMENTS - ALL INDUSTRIES BY VALUE

($'000)

Industry	Commondities	1962	1963
Asbestos Products	Brake linings, clutches	5,789	5,836
Auto Fabric Products	Covers, Cushions	13,075	17,091
Battery Manufacturers	Auto Batteries	23,464	24,703
Hardware Manufacturers	Auto Hardware	2,340	4,622
Radio/T.V. Receivers	Auto Radios	9,348	11,873
Metal Stampings	Hardware Accessories	5,038	5,404
Leather Products	Seat Covers	850	830
Motor Vehicle Manufacturers	Repair Parts	28,788	43,976
M.V. Parts/Accessories	*	396,160	499,310
Plastic Fabricators	Plastic Accessories	1,987	3,212
Tire and Rubber	Tires and Rubber	174,513	178,321
Wire Products	Braids, Springs	12,847	15,345
Other	Plastic, Cables	33,615	34,459
TOTAL		707,814	844,982

Source: Canada, Dominion Bureau of Statistics, Motor Vehicle Parts and Accessories Manufacturers, 1963. Annual Census of Manufactures (Ottawa: Queen's Printer).

* See Table VI-8 for more detail on this industry.

Note: It is difficult to obtain from official statistical reports data covering the total shipments by Canadian manufacturers of original or replacement commodities associated with the automotive industry. The main difficulty is that many products or materials for automotive application are not identified as such. Examples of these are castings, forgings, stampings, electrical components, etc. Also because of the nature of the products and materials, it is necessary for statistical purposes to classify the firms in different industries. Another problem is that some automotive firms manufacture parts for their own use, and these are not reported separately but appear in the total value of the end products.

TABLE VI-8

FACTORY SHIPMENTS OF MOTOR VEHICLE PARTS AND ACCESSORIES MANUFACTURERS, BY VALUE ($'000)

Product	1960	1961	1962	1963
Axles & Axle Shafts	6,953	7,628	10,803	-
Battery Cables	713	829	648	925
Brakes & Parts	5,508	5,525	7,460	10,796
Automobile Hardware	4,095	5,229	7,125	9,073
Heaters	3,015	4,051	3,279	-
Oil Filters & Parts	7,400	8,574	9,355	10,572
Pistons	1,276	1,137	2,459	2,630
Piston Rings	3,226	3,265	3,787	4,802
Complete Radiators	-	-	4,809	6,638
Radiator Cores	2,105	2,022	2,142	2,040
Spark Plugs	10,343	10,846	11,310	11,868
Chassis Springs	10,940	9,300	9,760	19,564
TOTAL	245,732	312,856	396,160	499,310

Source: Canada, Dominion Bureau of Statistics, Motor Vehicle Parts and Accessories Manufacturers, 1963, Annual Census of Manufactures (Ottawa: Queen's Printer).

Note: Data given in this Table are for Motor Vehicle Parts and Accessories Manufacturers, which includes only those Concerns that manufacture metal and auto parts as their chief products. Figures for the individual items do not necessarily represent the total output for Canada as there may also be an output by Concerns classified to other industry groups.

The automotive parts industry expanded production in recent years to supply the expanding finished vehicle industry. While shipments of all types of automotive parts increased by 19 per cent[7] in the one year period 1962 to 1963, imports of all types of parts increased by 28 per cent[8] in the same period. By the end of the first full year of the Automotive Products Agreement parts imports had increased by 29 per cent over the year.[9] Unfortunately no statistics are yet available for domestic production in 1964 and 1965.

That the Canadian automotive parts industry is import-competing is clearly evident from Tables VI-7 and VI-9. The value of imports in 1963 was nearly six million dollars, while total automotive parts production by all industries in Canada was eight and one half million dollars. This degree of competition, which persisted even in the face of tariff barriers, leads one to believe that free interchange of goods in the parts industry would quickly lead to drastic curtailments in Canadian production. Over 95 per cent of automotive imports are from the U.S. This is due to the integrated nature of the North-American automotive industry, whereby U.S. parts producers manufacture parts for use in both Canadian and U.S. vehicles' production.

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[7] See Table VI-7.

[8] See Table VI-9.

[9] See Table VI-9.

TABLE VI-9

TOTAL IMPORTS OF AUTOMOTIVE PARTS AND ACCESSORIES
BY VALUE ($'000)

Year	Total Parts Imports	Annual % Change	Imports From U.S.	Proportion of U.S. Imports in Total
1960	331,959	-	316,870	95.5%
1961	343,201	3.4	326,730	95.2%
1962	463,123	34.9	441,077	95.2%
1963	575,352	24.2	554,704	96.4%
1964	672,548	16.9	649,481	96.6%
1965	868,240	29.1	841,749	96.9%

Year	Imports From U.K.	Imports From W.Germany	Imports From France	Imports From Sweden	Imports From Japan
1960	9,487	4,499	606	128	-
1961	11,586	3,390	778	91	-
1962	13,289	5,970	1,485	204	-
1963	12,755	5,043	1,614	219	-
1964	14,083	4,969	1,685	460	-
1965	12,530	7,318	2,127	876	1,322

Source: Canada, Dominion Bureau of Statistics, Trade of Canada: Imports by Commodities (Ottawa: Queen's Printer).

It is unfortunate that statistics on parts production are not as current as those on imports of parts. Comparison of Canadian production and imports is made doubly impossible for 1964 and later, by the import reclassification which was inaugurated in 1964. A long list of diverse automotive parts imports for 1964 and 1965 is shown in Table VI-10.

Turning now for a closer look at Table VI-7, it is seen that, from 1962 to 1963, total automotive parts shipments by all industries increased by 10 per cent no doubt as a result of the surge in new vehicle production, and the 1963 tariff amendment which subsidized domestic production through an export incentive.[10] While all industries supplying the automotive trade shared in this increase, the most noticeable change was in the shipments of repair parts by motor vehicle manufacturers. These shipments increased by 53 per cent in the year, but still only made up a bout 5 per cent of total shipments by all industries, although the share is likely to increase:

> Thus new vehicles manufacturers are now going into 'all make' parts and accessories programmes, which means they hope to successfully move into each others aftermarkets and to capture a larger share of the business available.[11]

The motor vehicle parts and accessories manufacturers provided 50 per cent of all automotive shipments in 1963, and this represented an increase of 26 per cent over 1962.[12]

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10 See Chapter III.

11 Emil J. Bonkoff, op cit., P.22.

12 See Table VI-7.

TABLE VI-10
CANADIAN AUTOMOTIVE IMPORTS BY COUNTRY OF ORIGIN, ($'000)

Commodity	Class Number	From World 1964	From World 1965	From U.S. 1964	From U.S. 1965	% From U.S. 1964	% From U.S. 1965	From U.K. 1964	From U.K. 1965	From West Germany 1965	From France 1965	From Sweden 1965	From Japan 1965
Motor Vehicle Hardware, N.E.S.	46575	950	1,725	910	1,346	95.8	78.0	22	20	55	-	285	18
Asbestos Brake Linings	47434	1,204	995	904	650	75.1	65.3	271	296	39	9	-	-
Asbesdos Clutch Facings	47436	265	203	229	162	86.4	79.8	6	14	27	-	-	-
Bearings and Parts	50401	4,502	9,180	3,359	7,593	74.6	82.7	1,024	1,239	212	84	2	49
Diesel Motor Vehicle Engines	58804	9,595	11,603	6,765	10,331	70.5	89.0	2,792	1,202	50	-	-	21
Motor Vehicle Engines, N.E.S.	58819	20,469	43,324	19,123	40,852	93.4	94.3	249	33	1,083	21	-	21
Parts of Diesel Motor Vehicle Engines	58834	3,960	3,917	3,615	3,539	91.3	90.3	294	333	44	-	-	3
Parts of Motor Vehicle Engines, N.E.S.	58849	68,355	76,881	65,567	73,598	95.9	95.7	1,457	1,338	1,707	9	23	35
Bodies and Cabs - Commercial	58909	2,680	4,331	2,680	4,331	100.0	100.0	-	-	-	-	-	-
Automatic Transmissions	58925	41,598	-	41,463	-	99.7	-	133	-	-	-	-	-
Axles and Axle-Bars	58930	562	684	562	671	100.0	98.1	-	13	-	-	-	-
Jacks and Parts for Motor Vehicles	58935	480	660	446	561	92.9	85.0	5	6	2	1	64	25
Mirrors	58940	907	1,113	872	1,065	96.1	95.7	20	30	12	-	-	4
Parts under Tariff Item 438b, N.E.S.	58975	35,573	14,554	34,994	13,721	98.4	94.3	158	202	453	73	15	63
Parts under Tariff Item 438c, N.E.S.	58980	192,672	32,912	191,926	31,927	99.6	97.0	232	278	479	103	25	77
Parts under Tariff Item 438d, N.E.S.	58985	42,954	22,086	42,556	21,840	99.1	98.9	251	165	40	13	-	7
Parts under Tariff Item 438i, N.E.S.	58990	16,260	2,589	16,236	2,529	99.9	97.7	13	39	18	-	-	2
Parts under Tariff Item 950, N.E.S.	58995	-	522,968	-	522,603	-	100.0	-	199	60	-	67	-
Parts, Accessories, Assemblies, N.E.S.	58999	199,950	74,470	190,589	63,765	95.3	85.6	6,271	6,224	2,576	606	384	526
Passenger Car Pneumatic Tires	62105	1,371	2,840	885	2,270	64.6	79.9	159	160	77	150	-	1
Truck and Bus Pneumatic Tires	62109	6,485	8,436	5,109	6,904	78.8	81.8	203	76	9	1,017	6	417
Automotive Lighting Parts	68166	4,816	8,194	4,668	8,018	96.9	97.9	91	100	22	17	-	31
Starter Motors and Assemblies	68908	2,508	4,093	2,419	4,014	96.5	98.1	83	69	9	-	-	-
Distributors and Assemblies	68912	925	893	925	887	100.0	99.3	-	-	6	-	-	-
Generators - Battery Charging Type	68916	3,924	5,269	3,180	5,139	97.1	97.5	62	118	7	-	5	-
Spark Plugs	68924	766	956	507	684	66.2	71.5	59	122	23	1	-	17
Auxiliary Electrical Equipment, N.E.S.	68989	2,604	4,911	2,469	4,722	94.8	96.2	57	57	118	5	-	1
Parts of Electrical Equipment	68995	6,213	8,443	5,895	8,027	94.9	95.1	172	197	190	18	-	4
TOTAL AUTOMOTIVE PARTS	-	672,548	868,240	649,481	841,749	96.6	97.0	14,083	12,530	7,318	2,127	876	1,322

Source: Canada, Dominion Bureau of Statistics, Trade of Canada: Imports by Commodities, 1964, 1965 (Ottawa: Queen's Printer).

Automotive parts imports are shown in detail in Table VI-10. Although the changes in imports over one year are hardly sufficient to indicate a trend, the changes from 1964 to 1965 are important since they involve the tariff alteration of the 1965 Automotive Products Agreement. There are a number of difficulties in interpreting the statistics of Table VI-10. First, the class numbers of individual imported commodities cannot be directly reconciled with tariff rates, since the set of products which constitute the 'commodity' column of Table VI-10 are classified differently for tariff purposes.[13]

For example, the imported commodity, Motor Vehicle Hardware, N.E.S., classified as 46575 on the import classification which prevailed between January, 1964, and January, 1966, included products which came under tariff items, 346, 362c, 438c, 438i, 438u, and 446a.[14] In addition, to further complicate the issue, a new tariff item numbering system became effective on August 23, 1965.[15]

The dominant place of U.S. imports is clearly shown, as is the share of U.S. imports in total imports. This is not surprising though, since Canadian automobile production uses mostly U.S. parts, if they are not made in Canada. What is surprising is the surge in

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13 See, Canada, Dominion Bureau of Statistics, Trade of Canada: Import Commodity Classification, 1964. (Ottawa: Queen's Printer).

14 Ibid., p.166.

15 See, Canada, Dominion Bureau of Statistics, Convertibility Index of Customs Tariff Items to the Import Commodity Classification (Ottawa: Queen's Printer, 1965).

imports from West Germany, France, Sweden, and Japan. In view of the fact that there are French (Peugeot and Renault), and Swedish (Volvo) assembly plants in Canada the imports from these countries are probably mainly used as original equipment in Peugeot, Renault, and Volvo cars. The imports from West Germany and Japan are more likely to be destined for the replacement market, although there may of course by contracts to sell some of these imports to original equipment users in Canada.[16]

D. Canadian Automotive Exports and the Automotive Trade Imbalance

Canada exports finished vehicles and automotive parts but not to the extent to which she imports, with the result that there has been a large and growing deficit in the automotive trade balance.

Due to an export commodity reclassification in 1962-63, only the exports of finished vehicles and automotive parts after 1962 are shown in the tables on automotive trade balance, namely Tables VI-11 and VI-12. As Table VI-11 shows the total exports of finished vehicles more than doubled by value in each of the years 1964 and 1965, but although imports of finished vehicles increased at a lower rate in these two years the imbalance due to trade in finished vehicles with the rest of the world still increased.

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16 The patterns of distribution of parts, whether imported or domestically produced are presently unknown. The 'Automotive Industries Association of Canada, Ottawa,' is currently making a survey of Canadian automotive parts firms to determine the destinations of parts made in Canada.

TABLE VI-11

BALANCE OF AUTOMOTIVE TRADE WITH THE WORLD ($'000)

Year	Passenger Cars			Commercial Vehicles			Parts & Accessories			Total
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Balance
1960	-	213,648	-	-	33,802	-	-	331,959	-	-
1961	-	154,336	-	-	29,161	-	-	343,201	-	-
1962	-	151,245	-	-	27,709	-	-	463,123	-	-
1963	28,040	92,935	-64,895	9,070	23,714	-14,644	59,632	575,352	-515,720	-595,259
1964	67,665	138,729	-71,064	13,998	25,047	-11,049	105,250	672,548	-567,298	-649,411
1965	148,643	238,381	-89,738	32,054	47,108	-15,054	181,648	868,240	-686,592	-791,384

Source: Tables in Appendix D.

Note: Negative signs indicate deficits.

TABLE VI-12

BALANCE OF AUTOMOTIVE TRADE WITH U.S. ($'000)

Year	Passenger Cars			Commercial Vehicles			Parts & Accessories			Total
	Exports	Imports	Balance	Exports	Imports	Balance	Exports	Imports	Balance	Balance
1960	-	63,540	-	-	26,745	-	-	316,870	-	-
1961	-	47,953	-	-	23,329	-	-	326,730	-	-
1962	-	54,314	-	-	23,860	-	-	441,077	-	-
1963	637	28,636	-27,999	3,171	20,737	-17,566	36,358	554,704	-518,346	-563,911
1964	20,822	44,294	-23,472	5,173	22,900	-17,777	73,435	649,481	-576,046	-617,295
1965	66,216	125,432	-59,216	23,143	45,030	-21,887	142,994	841,749	-698,775	-779,858

Source: Tables in Appendix D.

Note: Negative signs indicate deficits.

The imbalance due to finished vehicle trade, however, is almost negligible compared with the imbalance due to trade in automotive parts. From Table VI-11 one sees that, in 1963, the ratio of imports to exports of parts was nearly 9.6 to 1. By 1965 this ratio was reduced to 4.8 to 1, but still left an imbalance of nearly seven million dollars. The net imbalance on all automotive trade with the world was nearly eight million dollars.

Automotive trade with the U.S. is shown in Table VI-12, the major item in the imbalance with the U.S. being automotive parts. This has been the result of the heavy depe ndence of the Canadian finished vehicle industry upon parts imported from the U.S. The importation of parts from the U.S. has been largely limited by the 'Canadian content requirement' imposed on the finished vehicle manufacturers, whereby their Canadian production is required to contain at least a minimum stipulated Canadian value added.[17]

In addition, since it has been a policy of the Canadian and U.S. automobile manufacturers to produce the higher priced cars in the U.S. and import them to Canada, there is also an appreciable imbalance with the U.S. in the trade of finished vehicles.

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[17] See Chapter III.

In the last three years the proportion of the automotive imbalance accounted for by trade with the U.S. has been increasing. In 1963, the figure was 94.7 per cent, a year later it was 95.1 per cent, and in 1965 it was 98.5 per cent, by value.[18]

This concludes Part I which has described the Canadian automotive industry and its relationship with the U.S. automotive industry. Part II describes the market structure of the Canadian automotive industry and appraises the 1965 Tariff Agreement. Accordingly, Chapter VII begins by describing the theoretical aspects of the industry.

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[18] Derived from Tables VI-11 and VI-12.

PART II

MARKET STRUCTURE OF THE CANADIAN AUTOMOTIVE INDUSTRY AND APPRAISAL OF THE 1965 TARIFF AGREEMENT

CHAPTER VII

THE THEORETICAL BASIS FOR AUTOMOTIVE INDUSTRY DEVELOPMENT UNDER THE AUTOMOTIVE AGREEMENT

The purpose of this chapter is to provide a theoretical outline for understanding the changes which are likely to occur in the Canadian automotive industry as a result of the 1965 Automotive Products Agreement. Accordingly, the first three sections describe the automotive manufacturing industry from the point of view of the markets for finished vehicles, original equipment automotive parts, and replacement parts. The basis for the description of the structure of these markets is Stykolt and Eastman's general industry model which asserts that 'manufacturing industries tend to be oligopolies in Canada and in the U.S., which is the principal supplier to Canada of manufactured products at present',[1] and the Royal Commission Report on the Canadian automotive industry, headed by Dean Bladen in 1961.[2] With this broad statement the stage is set to discuss the particular oligopolistic situation existing in the Canadian automotive industry. As far as can be ascertained these markets are oligopolistic in the sense that they are dominated by a few large firms which 'set' prices. After the establishment of prices the individual firm outputs are the result of non-price competition between firms.

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[1] S. Stykolt and H.C. Eastman, "A Model for the Study of Protected Oligopolies", The Economic Journal, LXX (June, 1960), 341.

[2] V.W. Bladen, Report: Royal Commission on the Automotive Industry (Ottawa: Queen's Printer, 1961).

The remaining sections of the chapter are devoted to discussing those particular issues which are central to the problems of tariff removal and rationalization of the Canadian and U.S. automotive industries. These are the problems of available markets and optimum firm size, trends in industry costs, economies of scale, and trends in prices. The subsequent chapter, chapter VIII then appraises these same issues by utilizing the results of Part I together with other empirical evidence to consider the possibility of the success of the Agreement.

A. Pricing and Output Policy in the Automotive Industry

The market structures that apply to the operations of the Canadian automotive industry are essentially oligopoly and monopolistic competition, with each market having a range of differentiated products. Before discussing the actual market mechanisms in the automotive industry, the general aspects of oligopoly and monopolistic competition are explained.

Oligopoly - In an oligopolistic industry each seller occupies a large enough segment of the market to believe that a change in his price, output, product quality, or sales promotional activity, would result in an unfavourable reaction from rival firms. The firm thus produces a certain output at a price, such that both price and output are acceptable to the firm and to other firms in the industry. Even though each firm in the industry may have a fairly stable price and product volume the demand curve faced by the firm will only be determinate if the reactions of rival firms are completely predictable. In practice there is likely to be a

definite, if not completely predictable, response from rivals if one firm does initiate, for example, a price reduction. Even though the products are differentiated, they are sufficiently alike that there would be some loss of sales by rival firms, which could be expected to also cut prices to regain sales. Of course there could be expected to be a certain degree of 'brand-loyalty' so that rivals' sales would not decrease as much as if all firms in the oligopoly were producing identical products.

Monopolistic Competition[3] - This term describes the market if the number of firms in the industry is so large that one firm supplies such a small fraction of the total industry market that it need not take into account the reactions of rivals when changing its pricing and output policies. Firms produce differentiated products and each firm tends to face a demand curve of nearly infinite elasticity. This very elastic demand curve arises from the fact that buyers of the industry's products are willing to pay a range of prices for the products - this range being a direct result of product differentiation. The profit situation of firms in oligopoly and monopolistic competition depends directly upon ease of entry into the industry. This facet of the problem is discussed later in this chapter in connection with the tariff.

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[3] In R.G. Lipsey and P.O. Steiner, Economics (New York: Harper and Row, 1966), p.313, monopolistic competition is "characterized by a large number of firms selling similar but differentiated products, with much effort devoted to non-price competition."

The finished vehicle market in Canada is differentiated oligopoly, while the automotive parts market ranges from differentiated oligopoly to monopolistic competition depending on the size of the firm. The actual automotive market situations are now described, beginning with the vehicle market.

Aa. The Finished Vehicle Market

The finished vehicle market in Canada is supplied by a few firms,[4] the majority of Canadian sales being products of subsidiaries of U.S. companies.[5] The industry is one of differentiated oligopoly with price leadership by General Motors in the form of 'umbrella' pricing. Umbrella pricing involves the price leader setting a price high enough that competition can also exist.

In an exposition of the U.S. automotive industry, which is similar in nature to the Canadian automotive industry,[6] Moore asserts that:

> There is an (oligopolistic behaviour) pattern in the automobile industries, but it is complex, and the fewness of manufacturers is tempered by the large number of dealers, parts supplies, and models of autos. To classify the industry as an oligopoly is not to deny the contention of its spokesmen who call it the most competitive business in the world.[7]

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4 See Chapter II

5 As far as passenger cars are concerned, the 'big four', Volvo, Peugeot, and Renault currently produce in Canada. A discussion of the market in Canada for Canadian-produced vehicles is essentially a discussion of the markets of the Canadian subsidiaries of General Motors, Ford, Chrysler and American Motors.

6 The underlying assumption in this thesis is that the integrated nature of the Canadian and U.S. automotive industries will permit rationalization under the Automotive Agreement.

7 D.A. Moore, "The Automobile Industry", in The Structure of American Industry: Some Case Studies (New York: The MacMillan Company, 1954), edited by W. Adams, p.301.

According to Moore the pricing of finished vehicles in this U.S. oligopoly is done be setting a price acceptable to the consumer and then designing the model to be competitive with others in that price range.[8] The price is predicated on the importance of maintaining volume.[9]

> It is said that the price at which a model should be sold is determined first and that the model is then designed to be competitive with other makes selling at or near the same price. This would tend to indicate that product design, more so than price, is the dynamic element of competition. How does each firm arrive at a price for each of its models? One cannot accept the answer that costs of production determine the price, for the price is presumably decided upon before the model is designed. Prices are not set to fit a cost analysis. Cost analysis determines the quality that can be produced in a price range acceptable to the public. The price of a given model tends to be somewhere between the maximum amount the public is expected to be willing to pay for it, and the cost of producing it. This suggests a demand analysis, but it is not correct to say, with Professor Vanderblue, that "demand sets the price".[10] His own analysis of the demand for automobiles shows it to be extremely complex, and dependent upon the appeal of the model itself. Besides, demand alone cannot point to a unique price, except in pure competition. Pricing, rather is an art depending upon the peculiar nature of both the supply and the demand for the product.[11]

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8 Ibid., p.304.

9 Ibid., p.310.

10 While this reference may seem out of date, more recent information on pricing policies is notoriously lacking. Even as recently as 1963 Rosenbluth and Thorburn state that, 'while it is generally assumed that the (Canadian motor vehicle) industry is competitive, no study of manufacturers' price policies has been made.' See G. Rosenbluth and H.G. Thorburn, Canadian Anti-Combines Administration, 1952-60. (Toronto: University of Toronto Press, 1963), p.79.

11 Moore, op cit., p.304.

There is no reason to believe that the pricing policy is any different between U.S. parent firms selling in the U.S. and their subsidiaries selling in Canada in view of the similarities in supply and demand in the two countries.[12]

As far as the establishment of a price acceptable to the consumer is concerned, the evidence points to price leadership by General Motors,[13] with Ford, Chrysler, and American Motors usually announcing similar new model-year prices after the General Motors' announcement. Price leadership by one firm constitutes collusive oligopoly pricing, and is made possible by the fact that General Motors concurrently has a large share of the market and low unit costs. If General Motors raises prices, other firms are likely to follow suit since this is probably the result of higher industry costs. If the price increase was solely to increase the profits of General Motors, however, profits in the other firms would also increase, and would give them the opportunity of not following the price rise of General Motors. If the other firms did not follow a General Motors' price increase, public opinion may well be strong enough to 'force' General Motors to eliminate the price increase. Thus General Motors is unlikely to initiate a price increase unless the other firms in this industry are likely to follow suit. On the

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[12] For instance, the integrated nature of firm operations in Canada and the U.S., and the similar range of automobiles available.

[13] Empirical evidence for the specific pricing patterns in the automobile industry is presented in Chapter VIII, Section D. A conversation with Mr. MacMillan at the Department of Industry, Ottawa, on October 3, 1966, elicited the opinion that General Motors was generally the price leader, both in Canada and the U.S.

other hand, General Motors is unlikely to decrease prices far enough to eliminate all the other firms, since this might introduce anti-trust legislation.[14] In addition the smaller firms in the industry are unlikely to initiate a price reduction to increase their market shares, since this might well start a price war with the price-leader - something which they could not hope to win. If the smaller firms increase prices, for whatever reason, they hope that General Motors will also increase prices. If General Motors does not raise its prices, the small firms have no alternative but to reduce prices to their original level or risk a loss of market.

Ab. The Original Equipment Automotive Parts Market.

The pricing policies of firms in the parts market is not so easy to comprehend, in view of the complex structure of the parts industry and its patterns of supply. With a simplified description of the market for original equipment parts it appears that the market form depends on the size and influence of the firm in the industry. The large firms operate in a more or less closed oligopoly, whereas

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14 In Canada the Combines Act states that "a conspiracy combination, or agreement is illegal only if it lessens competition unduly in respect of one of the following: prices, quantity, quality, markets or customers, channels or methods of distribution, or entry and expansion of rival firms." For an elaboration of the Act, and for examples of anti-trust action in Canada, see, G. Rosenbluth and H.G. Thorburn, Canadian Anti-Combines Legislation, 1950-1960. (Toronto: University of Toronto Press, 1963), especially p.93.
In the U.S. the Sherman Anti-Trust Act (1890) and the Clayton Act (1914) identified certain practices as illegal when the "effect was to substantially lessen competition." The present trend in judical interpretation of these Acts is such that market size is the criterion for prosecution. See, R.G. Lipsey and P.O. Steiner, Economics (New York: Harper and Row, 1966), pp.502-504.

the small firms are much more in an environment of pure competition where a price is given by a price leader. Producers of parts do so for the original equipment manufacturers, or for the replacement market, or for both markets. Thus, although the demands for original equipment and for replacement equipment are separate, the supply of parts for these markets is not separate.

The evidence of pricing of original equipment parts is scanty, but it appears that 'the market in which Canadian subsidiaries of large U.S. manufacturers of original equipment sell tires is a bilateral oligopoly. Prices in this market are established by independent and competitive negotiations between buyers and sellers.'[15] Even without strong evidence[16] to support the hypothesis it appears likely that the large parts suppliers and the original equipment manufacturers arrive at similar 'confidential' prices. The problem is further complicated by the vertical integration of the major automobile manufacturers. The latter are in a position to buy parts from (1) independent suppliers, (2) their own parts producing subsidiaries, or

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15 This was the situation in the market for tires in Canada; see Stefan Stykolt, Economic Analysis and Combines Policy: A Study of Intervention into the Canadian Market for Tires (University of Toronto, 1965), p.44.

16 Private Companies in Canada are not required to publish financial statements. Public Companies are required to publish financial statements and sales information, but may obtain a Court Order allowing them to withhold this information if it would help rivals to assess their competitive position. In the Financial Post , June 25, 1966, p.7, there is cited the example of "Ontario Steel Company, which is Federally Incorporated but will not disclose sales figures to shareholders... In the period January 1 to September 30, 1965, 79 per cent of total sales volume was sold to the major automobile manufacturers (Chrysler, Ford, General Motors). Disclosure of sales would make it obvious to these customers that they represented a substantial portion of O.S.P.'s market and that O.S.P. could not afford to lose them as customers. The companies could also see clearly O.S.P.'s margin of profits. The big customers would therefore, in all probability, desire to put pressure on O.S.P. to reduce these profits as they related to sales to such companies."

(3) "outside" firms which are closely tied to the manufacturer through ownership or contractual arrangements.'[17] Without evidence to the contrary, all that can be hazarded about original equipment pricing is that'prices to the big buyers are determined competitively in negotiations between a group of oligopsonists and oligopolists.'[18]

The upper level of price paid by the original equipment manufacturer in Canada would be the U.S. price plus Canadian tariff, if there were no Canadian content restrictions. In view of the content requirements[19] it is conceivable that Canadian parts suppliers could in the short-run charge a price higher than the U.S. price plus tariff, but in the long-run the threat of the entry of more firms to the industry would lower price. The lower level of price at which original equipment manufacturers could buy parts would be the factory cost of the parts suppliers. Of course, there are real barriers to the entry of new firms into this industry, and these are discussed later in this chapter in connection with the tariff.

Ac. The Replacement Parts Market

The replacement market is supplied by firms which sell these parts to three main types of distributor, namely, wholesalers, oil companies, and the original equipment manufacturers, for distribution

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17 D.A. Moore, op. cit., p.319.

18 S. Stykolt, op. cit., p.47.

19 The large motor vehicle manufacturers have to maintain Canadian value added, or 'content', at 60% of the value of factory sales. This measure is designed to support the production of parts in Canada and is discussed in chapter III.

to the replacement market.[20] The price of a replacement part is usually 'within pennies of the price of the same part when it is used as original equipment.'[21] Of course this 'price' will be a competitive price which a small independent parts supplier charges in both the original equipment and the replacement market.[22] It is most likely that the 'confidential' price agreed upon by an original equipment manufacturer and a large volume parts supplier is a lower price.

The existence of firms of widely varying size in the automotive parts industry[23] indicates that, if economies of scale really are important, the large firms have lower costs, but that the pricing mechanism in the industry tolerates the small, higher cost firms. The policy of a small number of large firms practicing price leadership such as to maintain competition is known as 'umbrella pricing.' One cannot say, on a priori grounds, to what extent the large parts firms tolerate the smaller, higher-cost firms, but the large number of firms suggests strong interfirm competition.

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20 See Emil J. Bonkoff, A Report on the Changed Automotive Aftermarket in Canada (Montreal: Dominion Brake Shoe Company, June, 1964)

21 This evidence from a conversation with the Sales Department of McCoy Bros., an Edmonton parts manufacturing firm.

22 Presumably a large parts firm which arranges a 'confidential' price when selling to an original equipment manufacturer would sell at a higher 'standard' price in the replacement market.

23 See Concentration Ratios in Chapter II, Tables II-1 and II-2.

In the absence of strong price leadership in the supply of replacement parts, there is a definite possibility of a price war. With a stable cost structure, if one seller reduces price to increase sales, the loss of market to rivals, if the loss is large, is likely to lead to further price reductions on the part of the rivals. It is much more likely, however, that the replacement parts industry has matured to the extent that a price, or a cluster of prices, has become established which is acceptable to all firms from the point of view of profits. Since there are so many small firms in the industry it is likely that they do not have a sufficiently high profit margin to be able to initiate competitive price reductions.

In fact, the evidence of Chapter V is that firms do not experience a stable cost structure, with the result that firms' profit situations will be affected. While details of input costs are unknown (except for wage rates), examination of unit costs[24] shows that unit labour costs are decreasing and unit materials' costs are increasing in the Canadian automotive industry. This change in the cost structure can be due to either changes in factor costs, or due to changes in factor proportions, or both of these causes. Thus, automation would cause unit labour costs to fall relative to unit materials' costs. In addition, change in relative factor prices would also affect unit costs. Without further details on costs, however, these effects cannot be separated.

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[24] See Chapter V, Table V-6 and Figure V-1.

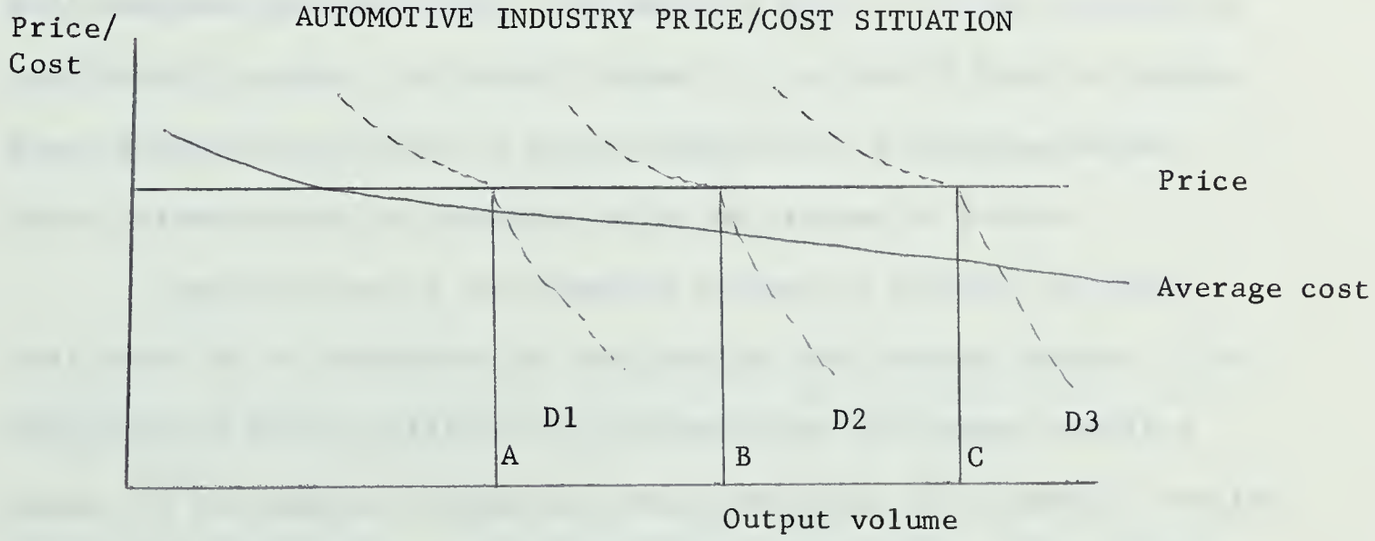
Ad. Summary of Automotive Pricing and Output Policy.

It appears that pricing policies in the automotive industry are strictly adhered to by firms in the finished vehicles market, the original equipment market, and the replacement parts market. Thus competition between firms must be based on superior quality or design, or other factors. In the long run the firm will anticipate its quota of the market, and build that scale of plant which leads to the least possible average cost at that output. It cannot be said that this plant will be of optimum size, and in the automotive industry in Canada, general opinion is that the size of plant will be less than optimum.[25] The size of plant will depend upon anticipated market growth and the reaction of rivals to a plants scale increase.

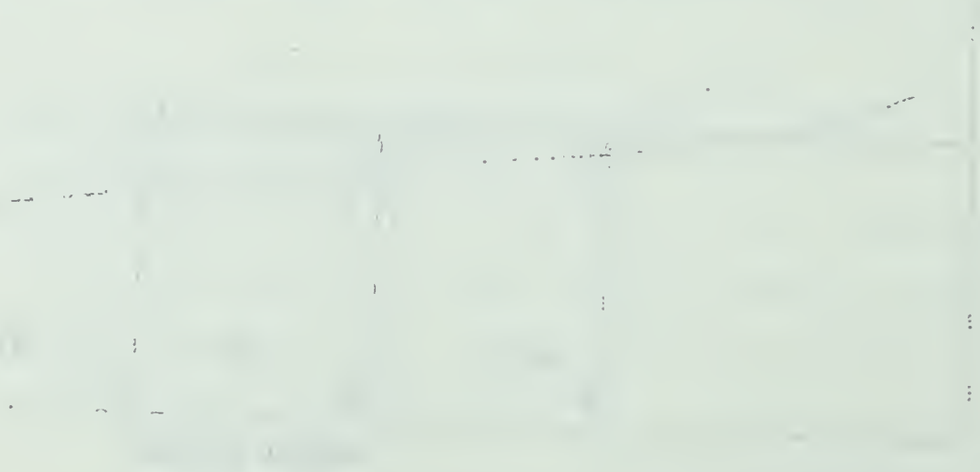
The pricing, output, and cost situation in the automotive industry may be summarized by Figure VII-1, following:

Figure VII-1

AUTOMOTIVE INDUSTRY PRICE/COST SITUATION



25 'Optimum size' is a term which defies accurate description. It depends on such things as technology available, relative factor costs, degree of integration of operation.



Assume price is set in the vehicle market by a price-leader, and by a group of large oligopolists in the parts industry. The decreasing average cost curves for each firm, in conjunction with given price and the market share of each firm determine the profit situation of the firm. If market share for a firm drops below A in the long-run then it ceases operation. Firms which can increase output to point C are in a superior unit cost position and have more influence on the price, whether this is in fact collusively or non-collusively established. The industry price only becomes established after a period of uncertainty during which each firm faces a 'kinked' demand curve, D1, D2, or D3. The 'kinked demand curve would only exist for firms in an immature industry where the possibility of price competition exists. The kinked demand curve arises from the belief that, if the firm reduces price, other firms follow suit to maintain market shares; if the firm increases price, the market share will decrease because other firms maintain price. If the industry is sufficiently stable, the demand curves D1, D2, and D3 have no meaning since firms do not resort to price competition to increase market share; firms accept the industry price or cluster of prices.

The structure of the Canadian automotive industry is further influenced by the existence of the Canadian and foreign tariffs. The influence of these tariffs on the market size, firm size, and firm costs, is the subject of the next three sections, B, C, and D. Section E then discusses the effects of the tariff removal on the automotive industry.

B. The Available Market and Optimum Firm Size

It seems to be generally accepted that U.S. production costs are lower than Canadian production costs, and the traditional explanation for this relative inefficiency of Canadian industry is that the number of firms in the Canadian industry is too large for the available market.[26] As a result, few of the Canadian plants can expand far enough to enable unit costs to be reduced to U.S. levels. The short production runs, which result from the smallness of the market, waste production time and mean that economies of large-scale production are not obtained.

Stykolt and Eastman have constructed a model which described in general terms the effect of the Canadian and foreign tariffs on market structures, competitive behaviour, and productivity in Canadian industry.[27] They agree that the foreign tariff can limit the size of the market for the Canadian producer, reducing the ability of the producer to compete on equal terms with foreign producers in foreign markets. They assert that this argument overstates the case that the limitation of the market necessarily results in inefficient production, and that the argument is deficient since it:

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[26] See, for instance, D.H. Fullerton and H.A. Hampson, Canadian Secondary Manufacturing Industry, Royal Commission on Canada's Economic Prospects (Ottawa: Queen's Printer, 1957), pp.69-73.

[27] S. Stykolt and H.C. Eastman, "A Model for the Study of Protected Oligopolies," Economic Journal, LXX (June, 1960), 336-347.

> accepts as given the existing structure of markets for manufactured products and the pattern of competitive behaviour which prevails in them. The Canadian tariff is the tariff which determines the number of firms in Canada, the pattern of competition, the size of firms, and the ease of entry and character of potential entrants.[28]

The argument that the foreign tariff limits the market available to the Canadian producer, and that this tariff alone forces the firms in the Canadian industry to be inefficient, only applies when the industry consists of a single firm whose size is below the minimum optimum size for operations in that industry. It is the Canadian tariff which tolerates inefficient firms in the industry since the Canadian tariff is the tariff which protects domestic industry against foreign competition.

The number of firms in an industry tends to be made greater by the protective effect of the Canadian tariff since firms can enter the industry and charge higher prices before imports become competitive. The size of an industry tends to be decreased by a foreign tariff since it limits the market. The ultimate size of the industry is the result of these two opposing forces, but also depends upon optimum scale of plants and various barriers to entry.[29]

In order to examine the optimum size of the firm and compare this with the size of the existing market for the purpose of obtaining an estimate of how large the industry can be in terms of the number of firms, it is necessary to know at what output the economies of large-scale production are exhausted. The best indicator of the

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[28] Ibid., p.337.

[29] See Section C of this Chapter.

minimum optimum size of the firm is the minimum optimum size of plant:

> However, the size of the plant is likely to set only the lower limit to the optimum size of the firm, because instances of diseconomies of multi-plant operations are rare. In most cases multi-plant operations either bring economies or are neutral, other impediments to growth than economies of scale being responsible for limiting the size of the actual firm. These other impediments are negatively sloped average revenue curves facing the firm, rising selling costs which result from product differentiation and non-price competition, the unwillingness of entrepreneurs to expand at the risk of losing control, limits imposed by the ownership of resources, and other institutional reasons.[30]

Thus the importance of the net effects of the Canadian and foreign tariffs is the limitation imposed on the expansion of industry markets in conjunction with the large number of firms in the industry. The effect on costs in the industry is discussed in the following section.

C. Automotive Industry Costs and Barriers to Entry

In the automotive industry the large initial capital requirements constitute a high barrier to entry, and the necessity of obtaining a high volume of sales means that a new entrant must be able to bid away business from the rest of the suppliers without risking a price war. The smallness of profits, particularly if the firm is small, and of high unit costs with a low volume of sales, is a penalty for late entry into this protected Canadian industry.

> If the barrier to entry provided by product differentiation and marketing is high the size of the firms is likely to be closer to the optimum, and marketing costs are probably high in the sense that profits may be no higher than the average in manufacturing as a whole. Where economies of scale are important, actual and potential brands are few, and relatively small advertising outlays are sufficient to establish

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30 Ibid., p.338.

> the identity of each product vis-à-vis its rivals. In the aggregate, advertising outlays of these industries need not be large to create a barrier against newcomers, and profits are abnormally high.[31]

Other barriers to entry such as resource ownership, techniques of production and imperfections in the input market, all tend to favour the large established firms which are U.S. subsidiaries. The most important consideration for a firm is the market for capital. While a small firm has to borrow funds and has to cover the cost of borrowing, as well as run the risk of loss of control of the firm as a penalty for borrowing, the large firms are able to draw on large internal pools of liquidity for their expansion needs, or to obtain the funds from U.S. parent firms.

H.C. Eastman[32] considers that timing and technical change are also factors for consideration, and that Canadian companies, with lower profit rates, cannot afford such frequent replacement of equipment. According to Eastman:

> Three choices are open to firms in Canadian industry. Thr first is to incur the fixed costs of designing methods based on present knowledge and appropriate to domestic relative factor prices. The second is to adopt the new U.S. techniques even though they are not exactly suited to domestic factor prices. The third is to adopt the old techniques of the U.S. which are appropriate to domestic relative factor prices, but based on outmoded knowledge.[33]

An important question for the future development of the Canadian automotive industry is whether or not there is any reason for technology

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31 S. Stykolt and H.C. Eastman, op. cit., p.343.

32 H.C. Eastman, "The Canadian Tariff and the Efficiency of the Canadian Economy," American Economic Review, Papers and Proceedings, LIV (May, 1964), 437-448.

33 Ibid., p.440.

to be different in the U.S. and Canada. Eastman does not think there is:

> Turning now to experience, it appears to be generally the case that the basic equipment used in manufacturing industries is the same in all industrialized countries. This is a recurring theme in international comparisons of manufacturing techniques. The minimum optimum size of plants in these countries is therefore the same for the same industry...Opportunities for varying the proportion in which factors are used arise where equipment is made especially for each installation... Relatively cheap labour does not affect the basic design becuase total labour costs are low. ...Hence techniques tend to be uniform internationally even in these cases.[34]

Although the basic design of equipment should not differ between Canada and the U.S., the difference in relative factor prices should affect the use of labour in peripheral processes when labour is relatively cheaper, and it also affects the rate of obsolescence of equipment.

> The rule is that equipment is obsolete when the variable cost of operating it is equal to the total cost of operating new equipment, and that point, is affected by the prices of both labour and capital. A fall in either the price of equipment or the rate of interest reduces the total cost of operating new equipment. Similarly a fall in wages reduces the variable costs of existing equipment and increases the time for which it is used. Thus relative factor prices determine standards of obsolescence. This discussion indicates that the substitution of factors in response to different relative factor prices occurs in the proportions of output produced by new plants and equipment, and in the degree of mechanization of peripheral processes, and only exceptionally in the basic design of the main items of new equipment. The minimum optimum size of best practice plants is therefore in most cases the same in

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[34] Ibid., p.440.

> Canada and the U.S., but the average size of plant may differ between the two countries owing to a slower rate of obsolescence in Canada. Consequently the appropriate indication of the efficiency of plants in Canada is the size of recent replacement or of new additions to capacity.[35]

D. Economies of Scale and Optimum Output.

Economies of scale are especially important in the automotive industry where complex technology is often necessary for efficient operations. In this connection, the technology available to Canadian subsidiaries of U.S. Companies enables these firms to achieve lower costs. Without going into detail the following quotes are indicative:

> President Walker, of G.M. (Canada), minimizes the difficulties of his operation. He says that running a subsidiary of General Motors is like writing a thesis while living next door to the best library in the world.
> . . . . . .
> Ford's Scott says that there is too much outside talk of lack of autonomy and control (in the Canadian automobile industry); that they have all the autonomy that any segment of a big corporation has; that what is needed is talk about the tremendous advantages the Canadian companies reap from ties with the huge U.S. corporation; that if the Canadians had to do the whole job, costs would be exorbitant.[36]

An independent Canadian firm would have to expand to larger outputs before it could achieve as low unit costs. With the limited Canadian market this consideration may be decisive for a firm contemplating entering the industry.

There is some evidence on optimum outputs from the Bladen Report:[37]

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35 Ibid., p.442.

36 _____, "Canadian Car Making Has its Own Problems," Business Week (January 26, 1963), 130.

37 V.W. Bladen, Report: Royal Commission on the Automotive Industry (Ottawa: Queen's Printer, April, 1961), p.28.

> The size of the U.S. market enables the larger producers to take full advantage of optimum scales of production in every phase of the industry. It is generally agreed that the overall optimum for automobile production is determined by the scale at which maximum economies can be achieved in stamping operations. It appears that as volume increases to 100,000 vehicles a year, economies of scale are substantial, particularly in assembly. As volume increases beyond this point, there are additional savings in machining and stamping operations although duplication of equipment is required for assembly and for other operations with relatively low optimum volume.
>
> . . . . . .
>
> The optimum scale for other parts and components will vary considerably and will depend on the techniques of production. If there is no machining or heavy stamping involved and if the techniques are similar to those used in assembly by automobile manufacturers, there is no reason to suppose that the optima will be very different.

Of course the above statement is very broad in scope and Bladen does not go into detail. It would be a major operation to determine the costs of producing different volumes of all the parts which constitute the modern automobile. In any case, data on costs are closely guarded secrets in the competitive life of the automotive industry.

The figure of 100,000 units per year is mentioned by A.K. Cairncross in a review of the automobile industry in the U.K.[38] In the U.K. automobile industry it is asserted that there are technical economies in body pressings up to outputs of 1 million per year, in machining up to the half million mark and in assembly up to 100,000, and that the long-run

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38 See G.Maxcy and A.Silberston, Review of The Motor Industry, by A.K.Cairncross, Economic Journal, LXIX (December, 1959), 786-788.

cost curve seems to fall more steeply than the short-run cost curve at outputs under 100,000 per year and less steeply at outputs above 200,000.[39] The figures, however, are misleading without knowledge on the degree of integration of the firm supplying the data. In addition there would be room for doubt if statistics applying to the U.K. automotive industry were applied to the North American industry, even though one may guess that there is a close similarity between automotive technology in the U.K. and North America.

While the amount of technical knowledge may not differ from one country to another, the use of this knowledge may vary, depending upon the degree of integration in the automotive industry in question, and the type of operation carried out.

The degree of integration in manufacturing is largely a function of size of operation, although it cannot be assumed that large operations necessarily lead to integration. In Canada, General Motors (Canada) and McKinnon Industries (a subsidiary of General Motors) together consitute the most highly integrated operation,[40] while other manufacturing companies tend to be less integrated. This means that they are mainly assemblers of vehicles and they buy parts from Canadian and U.S. parts' suppliers, although their operations may include the manufacture of some components.

In his report Bladen[41] compared production processes in a number

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39 Ibid., p.787.

40 V.W. Bladen, Report, Royal Commission on the Automotive Industry (Ottawa: Queen's Printer, 1957), p.26.

41 Ibid., p.27.

of developed countries and decided that, in the four basic processes of casting and forging, machinery, stamping, and assembly, there is maximum efficiency when final assembly of vehicles reaches 100,000 units per year, as does the assembly from parts of gear-boxes, rear axles, and other major components. The fact that General Motors and Ford do perform foundry operations in Canada is an indication that the relatively low levels of Canadian operations can be economic, although the decision of whether or not to undertake these types of operations is a matter of internal company policy as well as of economics. In machining of parts and body stampings the large investment in complex equipment necessary for these operations means that they are mostly carried out in the U.S., although Canadian content or value-added requirements force companies to produce or buy in Canada. The overall situation is neatly summed up by Bladen in the following:

> The size of the U.S. market enables the larger producers to take full advantage of optimum scales of production in every phase of the industry. The large European producers with their rapidly expanding markets, are similarly taking advantage of the economies of scale. It is generally agreed that the overall optimum for automobile production is determined by the scale at which maximum economies can be achieved in stamping operations. It appears that as volume increases to 100,000 vehicles a year, economies of scale are substantial, particularly in assembly. As volume increases beyond this point, there are additional savings in machining and stamping operations although duplication of equipment is required for assembly and for other operations with relatively low optimum volumes.[42]

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[42] Ibid., p.28.

This concludes the description of the automotive industry in Canada. The next section examines the consequences of the Canadian and U.S. tariff removal under the conditions imposed by the 1965 Automotive Products Agreement.

E. Consequences of Tariff Removal on Automotive Industry Structure

The 1965 Automotive Products Tariff Agreement conditionally removed the Canadian and U.S. tariffs on a wide range of automotive products, and this would be expected to result in structural changes in the Canadian automotive industry. An article by H.G.Johnson[43] provides a basis for understanding some of the possible changes. In particular, the tariff removal affects domestic production, oligopolistic profit in the Canadian industry, Government tariff revenue, and the 'benefits'[44] enjoyed by consumers of imported and domestic production.

Consider Johnson's model in Figure VII-2:[45]

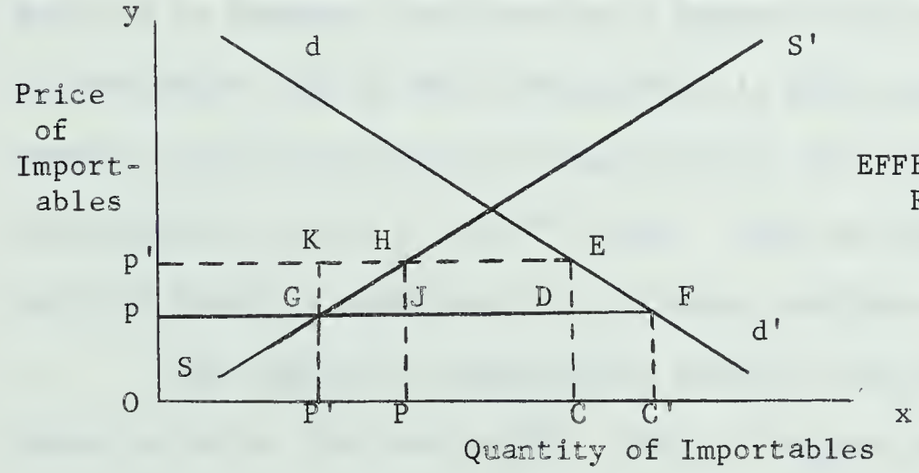


FIGURE VII-2

EFFECT OF TARIFF REMOVAL

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[43] H.G.Johnson, "The Cost of Protection and the Scientific Tariff," Journal of Political Economy, LXVIII (August, 1960), 327-345.

[44] Welfare aspects of the tariff removal afforded by the 1965 Agreement are outside the scope of this thesis. See Chapter I.

[45] Johnson, op. cit., pp.331-332. The argument is closely followed here.

Quantities of importable goods are measured along the x axis and the price of imports is measured along the y axis. The domestic market price of imports including the tariff is Op' and the foreign price of goods before importation is Op. Thus pp' is the excess of the domestic price over the foreign price, the difference arising because of the existence of the Canadian tariff. In Figure V11-2, dd' is the demand curve for goods whether they are imported or produced domestically, and SS' is the supply curve expressing the relation between relative price of importables and the quantity of them produced domestically.

With the tariff, consumption is OC, domestic production is OP, and imports PC. When the tariff is removed, consumption expands to OC', domestic production falls to OP', and imports expand to P'C'. The tariff removal decreases the total revenue accruing to domestic producers by an amount equal to the area GHPP'. In particular, GHJ is the revenue which is taken away from that domestic production which only exists while the presence of the tariff holds domestic price at the OP' level. When the price drops to Op this marginal domestic production is no longer profitable and it ceases.

With regard to oligopolistic profit, this decreases by an amount equal to the area pp'KHG. This is because product price decreases by an amount pp'. Area GKH represents the loss of profits which previously accrued to the marginal production that is eliminated by the tariff removal. Area pp'KG represents the loss of profit to that production which can exist at the

lower price Op.[46]

According to Johnson, the elimination of the tariff has the effect of reshuffling consumption and production patterns: 'first, production of certain importable goods may disappear completely, while others will for the first time come to be imported; second, the relative prices of untraded goods may change, due to changes in factor prices or in real costs induced by demand changes; and third, substitution will occur between imports and domestic (untraded) goods and among domestic goods.'[47]

Ea. The Finished Vehicle Industry

In view of the domination of this market by subsidiaries of U.S. companies, let us examine the market in terms of the operations of a Canadian subsidiary.

On Johnson's model, the line dd' represented consumer demand for finished vehicles. While this industry demand curve is downward sloping, the demand curve (which is the same as the average revenue curve) faced by each firm producing finished vehicles is of infinite elasticity. This results from the pricing mechanism in the industry whereby a price leader 'sets' price for the other firms in the industry[48], and means that the vehicle price does not alter as output changes. The price-leader also faces an infinitely

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[46] As a result of the tariff removal the government loses an amount of revenue given by area HEDJ, and consumers gain to the extent of area pp'EF since there is a price reduction of pp' and an increase of CC' in quantity taken.

[47] H.G,Johnson, op. cit., p.332.

[48] See this chapter, section A, for a discussion of industry

elastic demand curve provided product price is not changed after it has been set at the beginning of the model year; again price is independent of market fluctuations.

With the removal of the Canadian Automotive tariff in 1965 there was no surge in imports, nor a lowering of the prices of finished vehicles in Canada. Under the terms of the 1965 Agreement Canadian consumers are not eligible to import finished vehicles except with the same tariff duty as existed before the Agreement. The duty free importation applies only to eligible Canadian manufacturers on imports from the U.S.[49], and these manufacturers are not permitted under the Agreement to substitute imports for domestic production. Thus, in Figure V11 - 2, the tariff removal will not reduce domestic production below the level OP which existed in the base year before the 1965 tariff elimination.

As far as reduction in price is concerned, the Canadian vehicle manufacturers are under no more than a 'moral' obligation to reduce price from the p' level. Since the Canadian manufacturers determine the prices of domestically produced vehicles and control the means of pricing and distribution of vehicles imported duty free under the Agreement, free market forces cannot operate to reduce prices in Canada to the level Op which prevails in the foreign market. The Canadian manufacturers thus gain from the Agreement

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pricing policies. See Chapter V111, section D, for evidence on past pricing policies. After price is set, vehicle firms do not try to expand output through non-price competition. There is no evidence, however, that vehicle manufacturers resort to price competition after price for the model year is set.

[49] For terms of the Agreement see Chapter 1V, and Appendices A and B.

by not having to pay the import duty HJDE on those vehicles which it is their policy to import; and the method of tariff removal means that the firms do not forfeit oligopolistic profit in the amount of the area pp'KHG, which they would do under a completely free trade arrangement. The Agreement still prolongs the marginal production P'P which would be eliminated by completely free trade.

The Canadian consumer does not gain from the Agreement as he would do under completely free trade. In fact, since price cannot be expected to change in the short run from p', and quantity does not change from C, the consumer is no better off than before the Agreement.

The gains which are expected to take place in Canada, as a result of the Agreement, arise from the commitments to a certain rate of increased production by the Canadian manufacturers. The argument is that, as the domestic supply curve SS' moves to the right in Figure V11 - 2, manufacturing companies will be able to achieve lower unit costs through the economies of large scale production. The industry's oligopolistic profit would increase to the extent that costs could be reduced, allowing the possibility of price reduction. One of the considerations by the industry or its price leader regarding a price reduction, however, is the elasticity of the industry demand curve. If the demand elasticity is greater than unity a price reduction increases the total revenue; if the elasticity is less than unity a price reduction decreases total revenue. Thus the elasticity of the industry demand curve will be a prime consideration whenever the price leader considers a price change.

Since the price reduction can be expected to increase the sale of vehicles no matter how inelastic the demand curve, the changes in revenue from the price change must be balanced against the concomitant decrease in unit costs of production, if in fact there are economies from larger scale production.

Eb. The Automotive Parts Industry

Under the 1965 Agreement, automotive parts may be imported into Canada by eligible finished vehicle producers provided the parts are used as original equipment in new vehicle production. Replacement parts are not eligible for duty-free importation, and hence their patterns of production would not be expected to be altered by the Agreement.

In the case of original equipment parts, the finished vehicle manufacturers are the demanders for imported and domestically produced parts. Under the terms of the Agreement, Canadian vehicle manufacturers must incorporate Canadian-made parts to the extent that finished vehicle content is at least 60 per cent by value. This percentage is to be constant even though market increases. In addition, the vehicle manufacturers have agreed to increase Canadian value added in vehicle production by an additional $260 million over and above the increase due to market growth, in the period 1964-68.

Returning to Figure V11 - 2, assume that domestic parts' price is at the level Op' before the Agreement, and that OP is volume of domestic production while PC is imported. The relation between OP and PC reflects the 60 per cent Canadian content requirements. After the tariff elimination on parts, those parts

which are imported from the U.S. become cheaper by the amount pp'. The domestic price of Canadian-produced parts, however, is not reduced by pp' since the content requirements maintain a certain guaranteed market in Canada. Thus, when considering Johnson's model in Figure Vll - 2, the goods under consideration are those automotive parts which would not be of necessity produced in Canada to satisfy the content requirements.

Much the same arguments apply to tariff removal as in the discussion on the finished vehicle industry; Canadian parts industry profit decreases by pp'KHG, industry revenue decreases by PP'GHJ, and imports substitute for domestic production to the extent of P'P.

Patterns of the supply of original equipment parts are unknown, but there is one consideration which arises from the integrated nature of the automotive industry in Canada and the U.S. This is the fact that Canadian companies may buy parts from their U.S. parent operations if world profit to the company is greater than if the Canadian subsidiary bought from an independent parts supplier, even though domestic price is less than foreign price plus tariff. After the tariff reduction the Canadian companies would find it even more attractive to import from the U.S. in spite of lower parts' prices in Canada. Thus the content requirement is a very real protection for Canadian parts' firms.

One would expect that the demand for parts was not changed appreciably by a reduction in prices of parts, unless the resulting decrease in cost of finished vehicles was followed by a vehicle price decrease. Thus, when tariff removal reduces price by pp' the only effect is likely to be a substitution of imports for domestic production in the amount P'P.

This concludes the discussion on theoretical apsects of the automotive industry in Canada. The next chapter uses Chapter V11 as a basis for examining the main areas in which the future success of the Agreement will be judged. The results of Part 1 will be used in conjunction with other empirical evidence.

CHAPTER VIII

ANALYSIS OF THE MAIN FACTORS AFFECTING THE SUCCESS OF THE 1965 AUTOMOTIVE AGREEMENT

The theme of this thesis is the appraisal of the prospective success of the 1965 Automotive Products Agreement. While Part I was concerned with the historical development of the industry and the description of trends in costs, productivity, production, and trade patterns, and while Chapter VII described the automotive market structure and effects of tariffs, this chapter discusses those specific points which will determine the success or failure of the Agreement. These specific points relate to future markets, costs, productivity, and prices, and are now discussed in turn.

A. Market Size and Market Growth

The main factor affecting the success of the Agreement is whether there will in future be a volume of sales and market growth rate sufficient to enable the expected economies of large scale production to be realized, in both the finished vehicle and the parts industries.

This point raises a number of interesting questions. In the case that the U.S. sales did not increase, it is possible to envisage a situation where Canadian production might achieve substantial unit cost reductions through increased production. At first sight this would seem quite feasible since the expansion of Canadian production would presumably bring into use more and more of the technology and methods already in use in the U.S. In this

hypothetical case, if Canadian production could equal the scale of U.S. production then, in all likelihood, the unit costs in Canada could be reduced to U.S. levels.

In the real world, however, U.S. sales will be increasing as Canadian sales increase. If the crux of the whole problem really is the economies resulting from large scale production, then a narrowing of the cost and price differentials of U.S. and Canadian cars will only occur if Canadian cost reductions are brought about faster than U.S. cost reductions.

With regard to the commitments under the Automotive Agreement, each automobile manufacturer agreed to increase the Canadian value added in its Canadian production by an amount equal to 60 per cent of the increase in sales in the three year period to July 31, 1968, while the finished vehicle industry as a whole was committed to achieving an extra $260 million Canadian value added in its production, over and above that due to increased sales.[1]

Previous to the implementation of the Automotive Agreement on January 1, 1965, the Canadian parts manufacturers were protected by Canadian 'content' requirements.[2] The four largest of the Canadian finished vehicle manufacturers, namely, General Motors, Ford, Chrysler,

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[1] See Appendix B, for Summary of Letters of Agreement from automobile manufacturers.

[2] If the Canadian finished vehicle manufacturer produced less than 10,000 units per year, 40% of the factory selling value had to be Canadian value added; for 10,000 to 20,000 units per year, the figure was 50%; and for more than 20,000 units per year the figure was at least 60%.

and American Motors, were all producing more than 20,000 units per year and would have had to maintain Canadian content at 60 per cent of factory selling value or greater. If parts and components are on the average cheaper in the U.S. than in Canada (which is widely believed to be so), there would be no advantage to the automobile manufacturers to maintain Canadian content at higher than the required minimum of 60 per cent. Thus, one would be justified in assuming that Canadian produced automobiles contained approximately 60 per cent of Canadian value added.

On the basis of the previous statements one may assume that Canadian production by the large automobile companies will contain 60 per cent Canadian value added for the period of the Automotive Agreement, namely 1965-1968.

The statistics mentioned in the terms of the Automotive Agreement all involve the automotive model year which runs from August 1 to July 31. Unfortunately, the statistics used in this thesis are based on calendar year periods.[3]

Turning now to data from Part I, one sees that the total value of shipments from the Canadian finished vehicle industry was

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[3] Two separate requests to each of the large vehicle manufacturers for model-year or monthly data on value of output and value added in production did not succeed in eliciting the information. The Dominion Bureau of Statistics cannot publish this data, either, because manufacturing census statistics provided by manufacturers are on a whole calendar year basis. Value added data on a model-year basis have been gathered from random sources. The Department of Industry, Ottawa, has these statistics, but cannot divulge them for secrecy reasons.

$1,516 million for the calendar year 1963.[4] On the basis of a 60 per cent Canadian content, this would indicate that Canadian value added in 1963 was approximately $910 million. Using the same reasoning it can be assumed that Canadian value added was $710 million and $520 million for the calendar years 1962 and 1961, respectively.

With regard to estimates for the base year, August 1, 1963, to July 31, 1964, the estimate of $1,038 million for Canadian value added seems reasonable in the light of the calendar year figures.[5] The Financial Post also estimates that the extra Canadian content through market increase will be a minimum of $160 million,[6] and probably much more, by 1968. This figure represents the sum of 60 per cent of increased car sales and 50 per cent of increased commercial vehicle sales.

Thus, the Financial Post estimates that, in the model years 1964-1968, Canadian value added in finished vehicle production should increase by a minimum of $160 million plus $260 million, which amounts to $420 million. On the 1964 model year value of $1.038 million as the base, this represents nearly a 50 per cent increase in Canadian value added by 1968. If the 60 per cent Canadian content remains unchanged in this period, it means that Canadian production is also expected to increase by 50 per cent over the same five years, that is, at an annual rate of just below 10 per cent.

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[4] See Table V-1.

[5] This estimate is given in the Financial Post, February 19, 1966, p.17.

[6] Ibid., p.17.

Canadian finished vehicle sales increased by 10 per cent in 1964, and 15 per cent in 1965, and at an annual average rate of 15 per cent over the expanding period 1961-65.[7]

Production in Canada increased by 7 per cent in 1964 and 26 per cent in 1965.[8] The year 1965 was the first year that Canadian production exceeded Canadian sales of vehicles.[9] This great increase in production augurs well for the success of the Automotive Agreement and the ability of the Automobile companies to fulfill their commitments, especially as it happened in the face of a large increase in imports from the U.S.[10] The period 1961-1966 was one, however, of general economic expansion, and automobile sales would suffer in a recession.

With regard to future markets, the Financial Post[11] reports optimism on the part of the 'big four' in Canada, for continuing vehicle sales growth. General Motors forecasts a 6 per cent car sales increase and an 8 per cent truck sales increase for 1965-66, and continuing sales production increases through to 1970. These notes of optimism are based upon present trends in population and the extent of car owning. One thing is certain, the success of the Automotive Agreement depends primarily upon a growing market, and

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7 See Table VI-3, Chapter VI.

8 See Table VI-1.

9 Compare Tables VI-1 and VI-3.

10 See Table VI-5.

11 Financial Post, February 19, 1966, p.17.

the ability of the automobile companies to produce in Canada at a faster rate than the rate of Canadian sales increase. It is encouraging that 1965 was the first year that Canadian production was greater than Canadian sales, measured in numbers of units, and that imports from the U.S. increased at the same time.

The overall terms of the Automotive Agreement are designed as much to achieve lower unit costs, through increased production, in the Canadian automotive parts industry, as in the finished vehicle industry.

The parts industry, which historically has been protected by content requirements whereby the Canadian finished vehicle manufacturer maintained Canadian value added at 60 per cent of shipments, has potential future markets with Canadian original equipment manufacturers and the Canadian replacement market, and also with U.S. original equipment manufacturers and the U.S. replacement market.

In the past, in view of the higher selling prices of Canadian made parts, exports of parts to the U.S. were very limited, and this export market for parts cannot be expected to grow until parts' prices are reduced to U.S. levels.

The main hope for the Canadian parts industry, therefore, in achieving lower unit costs by means of any economies resulting from larger scale production, must come initially from expansion of the market in Canada.

The market in Canada for automotive parts consists of two separate markets, namely, the market for original equipment parts

and the market for replacement parts.

Historically the Canadian finished vehicle industry has maintained Canadian value added at approximately 60 per cent of total shipments, while somewhere between 30 per cent and 40 per cent has been via value added in Canadian finished vehicle manufacturing.[12] Thus, somewhere between 20 per cent and 30 per cent of the value of finished vehicle shipments has been output from the Canadian automotive parts industry.

The constancy of this ratio (at least till 1963) may be attributed to the relatively fixed integration in finished vehicle manufacturing.[13] In the future, however, with the expected large increases in Canadian finished vehicle production,[14] the vehicle companies may be expected to integrate their operations more on the lines of U.S. industry. To the extent that this happens through expansion of the finished vehicle industry, the existing Canadian parts industry will expand at a slower rate.

The replacement market for parts is an altogether different proposition from the original equipment market; replacement parts are

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[12] 36% in 1963; 35% in 1962; 38% in 1961. Derived from Table V-1.

[13] The argument here is that the volume of Canadian finished vehicle output has not been high enough to justify more integrated operations on the part of the manufacturing firms.

[14] Variously estimated to reach one million vehicles per year by 1970.

not included in the 1965 Automotive Agreement. The reason for this is that the replacement parts firms are small and serve small regional markets, leading to the belief that these firms would lose heavily in competition with U.S. firms,[15] owing to their higher costs.

Although so little information is available on the replacement parts industry as distinct f rom the original equipment parts industry, it is estimated that the sales of replacement parts in 1965 amounted to $502 million,[16] and this figure accounts for perhaps one third to one half of all automotive parts sales in Canada; this figure is exclusive of the very large amounts of parts imports.

While the finished vehicles market and the replacement parts market are almost solely functions of general economic conditions, the original equipment parts market in Canada is subject to another variable factor, one which is important in view of the future rationalization of the Canadian and U.S. automotive industries. This is the possibility of profit-sharing between integrated firms in Canada and the U.S. such that company world-profit is maximized at the expense of the Canadian subsidiary's profit.

If a finished vehicle company were completely Canadian owned, and without connections with a U.S. parent company, it would be logical, from a profit point of view, to buy parts in Canada to

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[15] See Emil J. Bonkoff, The Changed Automotive Aftermarket in Canada (Montreal: Dominion Brake Shoe Company, June, 1964).

[16] Report in Financial Post, March 5, 1966, p.4. Total shipments of all automotive parts in 1963 was $845 million. See Table VI-7.

satisfy the 60 per cent Canadian content requirements and then to buy the remaining parts from the cheapest supplier, which would probably be located in the U.S. The vehicle manufacturing companies in Canada, however, are subject to a complex problem regarding 'the decisions of a Canadian subsidiary automobile company in securing parts of an automobile, either from the same sources as are used by its parent company or by purchase in Canada.'[17] When examining the sourcing of parts one must consider 'the profits of the parent company and its subsidiary, and the trading-off of the one profit against the other which will occur when the subsidiary's decisions to import or secure the part locally are concerned.'[18]

Previous to the 1965 parts tariff removal, Canadian subsidiaries may have bought U.S. parts from the integrated operation in the U.S. even though the Canadian price was lower than imported price plus tariff, provided that company world-profit was greater than if the part was brought from an independent Canadian supplier. The 1965 removal of the tariff for original equipment parts means that this type of profit-shifting is likely to become more prevalent, to the detriment of the Canadian original equipment supplier.

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17 N.B. MacDonald,* "A Comment: The Bladen Plan for Increased Protection for the Automotive Industry," Canadian Journal of Economics and Political Science, XXIX (November, 1963), 505.

18 Ibid., p.505.

* Mr. MacDonald is special Financial Studies Co-Ordinator in Ford Motor Company of Canada, Limited.

In an article which surveys the economic effects of U.S. guidelines policies[19] on the operations of Canadian subsidiaries of U.S. parent companies, E. Kierans[20] examines a number of operations in Canada; he is not able, however, to include automotive firms in his investigation, presumably through lack of data.

In general terms Kierans agrees with MacDonald[21] that 'imports are tied by parent-affiliate transfers'[22] and he cites the evidence that the 1962 devaluation of the Canadian dollar did not reduce imports into Canada.[23] Kierans further supports MacDonald by saying that 'the primary purpose of investment in overseas markets (by a U.S. firm) is to earn a profit for the parent by the control of markets for the export of parts. It is not necessary that the affiliate show a profit.'[24]

Thus any future U.S. guidelines policy can adversely affect the structure of the Canadian automotive industry regarding its ability to compete independently in world markets. This is

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19 The U.S. Government has in the past, and may in the future coerce U.S. parent firms to contribute to a more favourable U.S. trade and payments balance by influencing the operations of foreign subsidiary companies. See Chapter I for recent U.S. guidelines policy.

20 E.W. Kierans, "The Economic Effects of the Guidelines," La Revue Juridique Thémis (September, 1966), 233-264.

21 N.B. MacDonald, op.cit., p.505.

22 E.W. Kierans, op cit., p.235.

23 See Tables VI-11 and VI-12. Automotive parts imports did continue to increase every year 1961-65, mainly because original equipment parts were needed from the U.S. for the expanding Canadian vehicle industry. Imports of finished vehicles did decrease 1963-64, after the devaluation.

24 Kierans, op. cit., p.235.

particularly important in the case of the Canadian parts industry since the decision of a Canadian motor vehicle manufacturer to buy parts from the U.S. parent operation limits the market of the Canadian parts industry. This in turn would deny the parts industry the opportunity to expand and achieve lower unit costs through the much discussed economies of large scale production. In the light of these remarks it is easy to see how important for the Canadian parts industry is the 60 per cent Canadian content requirement for finished vehicle manufacturers.

B. Automotive Industry Costs

The arguments regarding costs apply to both finished vehicle manufacturers and parts manufacturers and the two industries are considered together.

Costs and trends in costs are extremely important from the point of view of determining the possible success of the Automotive Agreement, since it is via reductions in unit costs, relative to the U.S. industry, that the Canadian automotive industry will be able to improve its competitive position.

Figure V-1, in Chapter V, shows that unit materials cost was decreasing, in the period 1958-63, for the U.S. industry, but was increasing for both the Canadian finished vehicle and automotive parts industries. At the same time as these changes were taking place in unit materials costs, changes were also occurring in unit labour costs: the trend is towards decreasing unit labour costs for all industries, although the trend is much smoother for the U.S. industry. Figure V-2 shows that hourly wage rates in all three

industries were increasing at roughly the same rate, and it may be deduced that much of the future ability of the Canadian industries to compete with the U.S. will depend on future trends in costs of materials.

The great variation in unit gross margins in the Canadian industries does not look as healthy as the steadily increasing unit gross margin of the U.S. motor vehicle and equipment industry, since unit gross margins are linked to profits and the possibility of replacement of old equipment and the use of new technology. In this respect, the profit situation of Canadian firms is less important to the firm if it has strong ties with a U.S. parent company. As integration of the North American automotive industry takes place, the profit situation of the Canadian branch of the industry will probably become less important. This integration has already progressed, in the case of Ford of Canada, to transferring Ford from the parent's international operations to North American operations.[25]

For the purpose of presenting the situation regarding competitiveness in costs a Brief submitted to the Government of Canada analyses the simple elements of cost, namely, materials, labour, and factory overhead.[26]

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[25] Financial Post, February 19, 1966, p.17.

[26] Automotive Parts Manufacturers' Association (Canada), Taxation and Tariffs in Canada Affecting the Operation of the Canada - U.S. Automotive Agreement, Brief Submitted to the Government of Canada (Toronto, January 6, 1966), p.7.

According to this Brief there is little difference at the present time between Canadian and U.S. prices of steel, copper, aluminum, lead, rubber, glass and textiles, provided large quantities are bought.[27]

With regard to labour costs, Figure V-2 shows basic hourly wage rates for the Canadian and U.S. automotive industries. These hourly wage rates appear to be increasing at the same rate, so that there is no narrowing of the differential. Using actual data from automotive parts firms, however, the Brief presents wage costs as a combination of hourly wage rates, premiums such as overtime, and fringe benefits.[28] In summary, the Brief states that average Canadian hourly wages are $.33 less than for comparable U.S. automotive parts firms. It should be noted that this differential is not comparable with the hourly earnings data of Table V-7.[29]

In the case of factory overhead costs the Brief estimates that Canadian overhead costs are uniformly higher than those of U.S. competitors mainly as a result of the effect of sales tax and duty, and, in spite of offsetting factors such as lower costs of indirect labour, the penalty costs ranging from 5.6 per cent to 19 per cent above U.S. costs.[30]

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27 Ibid., p.7.

28 Ibid., p.8.

29 The data of Table V-7 show aggregated industry statistics for industries which by definition are not comparable. The statistics quoted in the Brief apply to comparable automotive parts firms in Canada and the U.S.

30 Automotive Parts Manufacturers Association, Brief, op.cit., p.9.

Much of the machinery and equipment used for automotive production in Canada is imported from the U.S., and is subject to two taxes. First, an import tariff of 22½ per cent for machinery of a class or kind made in Canada, and 7½ per cent if not made in Canada (10 per cent and zero for British goods). Second, an 11 per cent general sales tax which applies to machinery both imported and domestically produced.

According to the Brief, costs in the Canadian parts industry have been appreciably higher than in the U.S. because of low volume of production, with the result that U.S. parts producers were able to supply at a price 15 per cent lower on the average.[31] The import duty and sales tax have been widely discussed in the connection of reducing the costs of automotive parts firms, and the recent action of the Government of Canada

> to allow the almost duty free import (99 per cent remission of tariff) of certain production machinery and equipment required by manufacturers of automotive parts[32]

will certainly aid the expansion plans of Canadian automotive parts firms, although purchases of machinery and equipment will still be liable for the 11 per cent general sales tax.

The relative disadvantage of the 11 per cent sales tax, vis-à-vis U.S. industry, will become more pronounced as the present U.S. excise tax of 7 per cent becomes reduced to 1 per cent by 1969.[33]

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31 Ibid., p.3.

32 Financial Post, July 30, 1966, p.1. Only producers supplying 10% of the market are eligible.

33 Time Magazine, October 8, 1965, p.15.

C. Economies of Scale and Optimum Output

Table V-9 and Figures V-4 and V-5 show that productivity of the parts and the vehicle industries in Canada, as well as the U.S. industry, whether measured by value added per man-hour in manufacturing or by the ratio of total shipments to total employment, showed a definitely increasing trend. In fact the trends in productivity seem to follow closely the trends in output.

From the point of view of the success of the Automotive Agreement one is concerned with relative increases in productivity, since productivity measurements may give some indication of economies resulting from large scale operations. For instance, if it could be shown that productivity in the U.S. industry was not increasing in spite of the fact that output was increasing, this might indicate that economies of large scale had been fully exploited.

The evidence, however, from Figures V-4 and V-5 is that U.S. productivity is still increasing, even at the outputs which are extremely large by Canadian standards. Moreover, the rates of increase of productivity do not suggest that the Canadian industry can easily acquire equality of productivity with the U.S. industry. Of course since the methods used in the industries are different (the U.S. industry is more integrated and involves more complex technology than the Canadian industry) it is not fair to compare absolute values of productivity, but if the data could have demonstrated some clearly different long-run trends in productivity change, this might have been sufficient to make some deductions regarding economies of scale. Table VIII-1 shows the annual rates of productivity change

TABLE VIII-1

ANNUAL PERCENTAGE CHANGES IN PRODUCTIVITY IN THE CANADIAN AND U.S. AUTOMOTIVE INDUSTRIES

	1959	1960	1961	1962	1963
Canadian Motor Vehicle Industry					
Labour Productivity	22.1[E]	3.4[E]	0.5[E]	14.8	12.3
Output per Head	0.4	9.6	-3.4	26.4	10.1
Canadian Parts & Accessories Industry					
Labour Productivity	7.5[E]	3.5[E]	-10.0[E]	7.7	9.7
Output per Head	4.4	5.7	-7.7	14.7	9.0
U.S. Motor Vehicle & Equipment Industry					
Labour Productivity	11.2	1.9	5.2	10.7	3.4
Output per Head	16.7	2.7	-0.7	14.5	7.1

Source: Derived from Table V-9, Chapter V.

Note: E indicates an estimated value. See footnote to Table V-9.

for 1959-63. Since there appears to be no absolutely clearcut difference in productivity trends in the industries, it must be concluded that there are still economies of large scale even at the large U.S. outputs. To the extent that this is true, any hope of equalizing U.S. and Canadian costs will not be realized through Canadian industry expansion to take advantage of lower unit costs via economies of large scale production. If the Canadian industry grows faster there could conceivably be a time when Canadian productivity attains the U.S. levels. Due to lack of information on actual reasons for productivity change the whole question of productivity trends is in doubt.

In the last chapter, the figure of 100,000 units per year is mentioned as being the optimum output for assembly-type operations. According to the evidence in Chapter VII, Section D, the optimum tends to occur at higher outputs as the operation becomes more complex. As Table VIII-2 shows, production of most types of car in Canada is substantially below the supposedly minimum cost output of 100,000 units per year.

In 1965, American Motors only produced 31,000 Rambler units, Chrysler produced 136,000 units of four different types, Ford produced 169,000 units of six different types, General Motors produced 347,000 of five different types, and Volvo produced 3,000 units.

From this evidence it must be deduced that the break-even point for Canadian operations must be considerably below 100,000 units per year, the break-even point in manufacturing being that output below which it is not profitable to continue operations.

TABLE VIII-2

CANADIAN PASSENGER CAR PRODUCTION BY MAKES

	1963	1964	1965
AMERICAN MOTORS			
Rambler	30,167	35,129	31,347
CHRYSLER			
Chrysler	12,023	15,712	21,273
Dodge	21,378	28,621	53,101
Plymouth	21,443	23,466	30,169
Valiant	31,961	36,935	31,303
Total	86,805	104,734	135,846
FORD			
Ford/Galaxie	54,232	60,624	75,044
Fairlane	21,122	21,084	16,207
Falcon	14,256	13,796	13,069
Mercury/Monterey	21,188	11,208	10,831
Meteor	17,761	26,066	37,637
Comet	13,714	20,465	16,388
Total	142,273	153,243	169,176
GENERAL MOTORS			
Chevrolet	117,986	113,295	162,989
Acadian/Pontiac	115,211	98,027	138,893
Oldsmobile	16,761	19,363	25,984
Buick	14,383	15,782	23,437
Total	264,341	246,466	351,303
STUDEBAKER	8,190	17,614	18,542
VOLVO	1,139	2,206	3,353

Source: Motor Vehicle Manufacturers' Association, Facts and Figures of the Automotive Industry, Yearbooks and Monthly Bulletins (Toronto, 1966)

The break-even point depends in large measure upon the degree of integration in operations. Empirical evidence on the break-even point comes from the survival campaign that American Motors of the U.S. conducted from 1957.

> "Survival was to be based in large measure on keeping the break-even point low and the low break-even point was to be maintained by manufacturing only the bare essentials (motors, bodies, transmissions and a few other items), by purchasing the remaining items from outside suppliers, and by maintaining a single assembly center. By the end of 1957 American Motors had become the least integrated manufacturer in the business and had thereby helped prepare a flexible base from which to operate in the ups and downs of the automobile business.
> . . . . . .
> The company had reduced its break-even point to an estimated 125,000 units."[34]

It can only be concluded that an assembly-type operation in Canada could have a break-even point of much less than 125,000 units, since this figure of 125,000 involved American Motors in the production of complex components such as bodies, motors and automatic transmissions.[35]

If the evidence on cost and optimum outputs seems scanty for the vehicle industry it is even worse for the parts industry. The great variations in size between Canadian parts firms suggests a great variation in optimum outputs in the different firms. As output has increased in the automotive parts industry, productivity

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[34] Edmund P. Learned, et al., Business Policy: Text and Cases (Illinois: Richard D. Irwin, Inc., 1965), p.121.

[35] See Chapter VII, Section D. The more integrated is the automotive operation, the higher are the initial unit costs; thus, the larger is the output as which a firm can break-even on costs and revenue.

has also increased. Without engineering data on changing production methods, however, it is difficult to deduce how this increase in productivity was really derived.

D. Pricing in the Automobile Industry

The wholesale selling price of the U.S. motor vehicle and equipment industry has decreased irregularly since 1960.[36] In contrast the wholesale selling prices of the Canadian motor vehicle and the Canadian parts industries have increased appreciably. The trend was concurrent with a larger, increasing unit gross margin in the U.S., and a smaller unit gross margin in Canada.[37]

When one considers the price changes after 1963 and the trends in unit gross margins, one wonders whether the Canadian industry can reduce the differential in Canadian and U.S. prices independently of quantity sold. For instance, both car sales and unit gross margins were at a low in 1961, and it seems evident that any future permanent Canadian price reduction (which would presumably be accompanied by higher unit gross margins) would have to be the result of high sales volume.

The drop in Canadian new car prices in 1965, compared to 1964

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[36] See Table V-8 and Figure V-3.

[37] See Table V-6 and Figure V-1.

prices, continued for Canadian 1966 models:

> General Motors has announced reductions in prices of 1966 model cars, compared with similarly equipped 1965 model cars by an average of $73 a car; Ford by $62 a car; Chrysler by $38 to $126 a car; and American Motors by $116 to $222 a car.[38]

The trend towards lower car prices in Canada was not continued for the 1967 models, when General Motors, Ford, and Chrysler, announced higher new car prices compared with 1966 models. Average prices per car rose by $43 for General Motors, $41 for Ford, and $53 for Chrysler.[39]

New car prices in the U.S. also rose for 1967 models, but the increases are larger than the Canadian increases, even after a most interesting price juggling episode:

> Ford and Chrysler have reduced the recommended prices of their 1967 cars because General Motors, the largest of the 'big three', announced smaller price increases than they did. Ford reduced its average price increase from $120 to $21, and Chrysler from $99 to $66. General Motors' average increase was $57. Originally Ford announced its prices first, Chrysler next and General Motors last. Ford then claimed that only $27 of its increase represented a higher basic price, and the rest was accounted for by improvements. None of the leading car manufacturers has ever changed its mind about recommended prices in this way before.[40]

The price differential between similar Canadian and U.S. cars decreased in 1966, and the differential further decreased for

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38 Department of Industry, News Release (Ottawa, October 28, 1965). The companies also announced price reductions for cars which they imported and distributed in Canada via their dealer organizations.

39 Globe and Mail, Toronto, October 5, 1966.

40 The Times, London, September 28, 1966. Funds are expressed in $ Canadian.

1967 model-year cars:

> The average differential between Canadian and U.S. prices for the popular models of 1965 cars was somewhat less than $150 or 8 per cent. The manufacturers' wholesale prices at the factory for 1966 cars show a significant narrowing of this differential, ranging from one third to one half (of the previous differential in car prices) for the three companies concerned. The 1966 differential ranges from 3 per cent to 5 per cent (depending on the model of car).[41]

The announcements of the 1967 model year prices show that the differential is further reduced. A spokesman for General Motors (Canada) says[42] that the smaller price increase in Canada, compared to the U.S. reflects action taken by the companies to meet the terms of the Automotive Agreement.

If, as it appears, General Motors sets prices and the other new vehicle manufacturers follow suit, then the differential in Canadian and U.S. car prices will be determined by General Motors.

In the U.S. in the past, the opinion has been widely held that General Motors could still sell at a profit at a price lower than the unit costs of production of the other vehicle manufacturers. It has been to the advantage of General Motors, however, to allow the competition from other companies to continue, since this avoids the possibility of anti-trust legislation being enacted to force General Motors to break up into smaller independent divisions. There is also the possibility of similar anti-trust legislation in Canada,[43] and this

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41 Department of Industry, News Release, Ottawa, October 13, 1965.

42 Globe and Mail, Toronto, September 30, 1966, p. 81.

43 See Chapter VII, Section A.

should be expected to continue in the future. The narrowing differential in car prices should thus reflect the estimate that General Motors puts on the costs of its competitors, the price leadership of General Motors presumably being such that competition is allowed to exist with an acceptable rate of profit.

CHAPTER IX

CONCLUSIONS

This thesis has examined the Canadian automotive industry and the 1965 Canada - U.S. Automotive Products Tariff Agreement in order to evaluate the implications of the Agreement.

The Canadian Government had four main objectives in implementing this Agreement: first, the closer rationalization of the Canadian and U.S. automotive industries into one North American industry in order to increase the competitiveness of the Canadian industry, vis-à-vis the U.S. industry, by the achievement of unit cost reductions through economies of large scale production; second, the expansion of production and employment in the industry in Canada; third, the reduction of the price differential which exists between similar models of automobile in Canada and the U.S.; and fourth, the reduction of that part of Canada's trade deficit which is caused by the imbalance in the automotive trade.

The thesis began by explaining the apparently changing attitude, on the part of the Canadian Government, to the existence of of trade barriers; the Government believes that the Canadian industry has progressed beyond the stage of an infant industry, and that the Automotive Agreement provides a means of accelerating the progress of the industry towards becoming more competitive on world markets. The fact that the terms of the Agreement would increase U.S. influence on the Canadian automotive industry is a political question and is only mentioned here.

The thesis noted that the Canadian automotive industry has developed behind a protective tariff wall and that the major U.S. automotive producers maintained subsidiary companies in Canada, but which nevertheless depended to a large extent in their operations on the facilities of the U.S. parent companies. The importation of parts into Canada is only one aspect in which Canadian firms depend on U.S. parents; to an unknown extent they are also dependent on the other integrated facilities of the parent. The subsidiaries of U.S. companies dominate the industry in Canada and this allows the possibility of a change in industry structure under the auspices of the Automotive Agreement.

In order to empirically evaluate the Agreement the thesis presented aggregated historical statistics which demonstrated recent trends in (1) production and employment levels, (2) costs, (3) productivity, and (4) prices, in the Canadian and U.S. automotive industries, and (5) the trade in automotive products between the two countries.

There were three main problems involving the statistics used: the lack of data on individual companies, the difficulty arising from the method of categorization and definition of the industry, and the statistics relating to the industry, and the limitations imposed by the necessarily short period covered by the data. The aggregated industry statistics used in the thesis were provided by the Census of Manufactures in both Canada and the U.S., and also by various Trade Organizations. Much of the data on individual companies, however, was not available. The only readily available company data related to monthly production

figures of finished vehicles; no source of information was found on imports and exports of specified automotive products by individual companies. Neither was there information on investment, profits, costs, or transfers of capital between Canadian firms and the U.S. parents. Without this information the fact that Canadian vehicle manufactures will increase their Canadian value added by $260 million has little meaning to the outside investigator. Thus, particularly on the cost side, the data in the thesis had to be aggregated for the industry as a whole, since firms will not provide this data on the grounds that it would prejudice their competitive positions in the industry.

The empirical data has compared the Automotive industries in Canada and the U.S. as closely as the available data allowed. The data in the two countries, however, is not strictly comparable. In Canada the automotive industry is broken down into two distinct industries, the motor vehicle manufacturing industry and the motor vehicle parts and accessories industry; in the U.S. all establishments, whose major output is an automotive product, are classified in the Motor Vehicle and Equipment industry. In the past it has been logical to separate the Canadian industry into a finished vehicle segment and a parts and accessories segment, since firms tended to produce only one of either parts or finished vehicles. As the Canadian industry has progressed, however, finished vehicle firms have become more integrated and are tending to produce more and more of their needs in automotive parts and accessories. In fact one of the reasons why finished vehicle manufacturers did not integrate their operations to the extent that they produced a large amount

of automotive parts was the relatively small market for automotive products in Canada combined with the cyclical nature of demand for automobiles. As the market for finished vehicles has grown in Canada the output mix of finished vehicle producers has changed so that the classification of the output from this industry as solely finished vehicles is in error. The classification used in the U.S. overcomes this inaccuracy by aggregating the finished vehicle and the automotive parts industries.

Thus the statistics which show trends in the automotive industries in Canada and the U.S. are not directly comparable; rather they should be accepted as characteristics of the industry. The value of these statistics lies in the trends which they show taking place in the respective industries.

In addition to the categorization difficulties of the data another problem arises from the changes in classification of the statistics. More explicitly, comparable production statistics are limited to the years 1958 and later, comparable import statistics to 1964 and later, and comparable export statistics to 1963 and later.

The statistical tools used for the evaluation of the Agreement demonstrate the recent industry trends in production, costs, prices, productivity and inter Canada - U.S. trade in automotive products. If the goals of the Agreement are forthcoming one would expect to see the productivity in the Canadian industry increase towards the higher level of productivity in the U.S. industry; average costs would decrease in the Canadian industry, but the available data do not show actual costs; the price differential between similar vehicles manufactured in Canada and the U.S.

would decrease; the flow of trade in automotive products between Canada and the U.S. would increase, with a tendency to decrease the Canadian trade imbalance.

The Automotive Agreement has only been in operation since the beginning of 1965, and the present time is too early to be able to describe any substantial changes which have so far occurred in the industry. However, it is possible to point out some changes which have taken place and may in future take place. In implementing the Agreement it seems to have been assumed by the Canadian Government that the Canadian industry will be able to achieve large unit cost reductions compared with any future cost reductions in the U.S. industry and that there is a high degree of competition between the two industries. The evidence of this thesis, however, indicates that this may not in fact be the case.

With regard to competition between a U.S. parent firm and its Canadian subsidiary, the external investigator does not really know to what extent the two branches of the firm compete; for instance, vehicle imports from the U.S. are distributed in Canada by Canadian firms which buy from the U.S. parent. Under the Agreement this method is likely to continue. In fact, since the import tariff of 17½ per cent still holds for individual Canadian importers the Agreement makes it all the more likely that vehicle imports will be through the established Canadian manufacturers' dealer network. One could hardly imagine a Canadian manufacturer importing large quantities of vehicles which would cut into his own domestic sales, if he were acting for his own profit. Of course, the operative phrase here is

'acting for his own profit'. Chapter VIII discussed the trade-off in profit which might occur when a Canadian vehicle manufacturing company considers where to buy automotive parts. It was asserted that the profit of the Canadian company was not the prime consideration for trade. After the enactment of the Agreement and the rationalization of the Canadian and U.S. automotive industries it is likely that the profit situation of the Canadian branch of the industry will be even less of an influence on Canadian operations. If the rationalization takes the form, however, of reorganization of production facilities so that there is no duplication of productive facilities, then the problem of imports affecting domestic production would not arise. Even so the 'content' requirements and the terms of the Agreement are necessary to guarantee at least a certain volume of Canadian production.

One wonders on a priori grounds whether complete rationalization is part of the plans of the automotive firms. A similar situation to this problem occurred in Europe. Before the European Economic Community came into existence firms were established in more than one of the European countries. As tariff barriers have been removed between the countries, there has not been a move to completely abolish duplication of production. It has been the policy of firms to maintain at least two plants in different locations, producing identical products. This ensures a continuous supply of product even though a plant is non-operationable.

Excess capacity must also be considered in regard to

rationalization. The cyclical nature of the demand for vehicles means that firms are unwilling to add to capacity to the extent that they would lose heavily in a recession. Thus the value added requirements of $260 million over and above market growth in the period 1964-68 represents a large increase, when one notes that Canadian vehicle manufacturing value added was $910 million in 1963 and actually at a value as low as $523 million in 1961. The fact that Canadian companies are willing to commit themselves to such large increases in value added evidences the belief that future vehicle demand will be sufficient.

There is much talk in the industry about the savings to be achieved through economies of large scale. The evidence of this thesis shows that productivity, as measured by value added per man-hour, is much higher in the U.S. Present trends in productivity, however, are such that there is very little difference between rates of productivity increase in Canada and the U.S.

Thus, it appears as if the higher productivity in Canada, envisaged as a result of the Agreement, would not be sufficient to raise Canadian productivity to U.S. levels.

This productivity differential could be offset by lower costs in the Canadian industry, but the evidence of Chapter VIII is that, although labour costs are low in Canada, and materials costs are approximately the same, overhead costs are higher in Canada. Since unit labour costs are decreasing in all industries, the relative advantage of lower labour rates in Canada will become

less significant in Canada. In order to make a more clear-cut statement on the relation of costs, productivity and output volume, more detailed information would be required.

Another aim of the Agreement was the increase of employment in Canada. Employment levels may be expected to be directly related to production level in the short-run. In the long-run, and particularly under the Agreement, the labour to output ratio may change appreciably in the automotive industry. Since the Agreement envisages specialization in Canadian plants, there is likely to be an increase in automated methods in Canada, so that employment will increase at a slower rate than production. The Agreement has not yet been in effect two years and it is too soon to see whether there have been any employment changes as a direct result of the Agreement.

The statements of government officials regarding the result of the Agreement on the automotive trade balance were to the effect that the automotive trade balance would be decreased. One would expect that automotive trade would increase between Canada and the U.S. as a result of the Agreement, but it is a moot point as to whether the trade would be such as to reduce Canada's automotive imbalance. It must be remembered that the large increase in the automotive trade, which is expected to occur under the Agreement, will only take place when firms are rationalized sufficiently so that duplication of facilties is discontinued. This will only happen in really large volume when the number of different models produced in each of the two countries is reduced so that one country supplies that other's

market in some automotive products.

The results of Chapter VI show that the export of finished vehicles did in fact double in the period 1964-65, but they also more than doubled in the period before the Agreement in 1963-64. While the U.S. did receive increased exports of vehicles this only amounted to half of total vehicle exports. Exports of automotive parts doubled annually in 1963-64 and 1964-65, most of the increase going to the U.S. Imports of vehicles also doubled each year for the period 1963-65, while imports of automotive parts increased relatively slowly. The overall effect of the automotive trade was to further increase the annual deficit in automotive trade, most of the deficit being accounted for by trade with the U.S. As far as a prognosis for the future is concerned it does not seem likely that the automotive imbalance can be reduced in the near future since, although exports are increasing rapidly, the main item contributing to the imbalance is the imports of automotive parts. The import of parts can only be expected to increase as Canadian vehicle production increases.

The Canadian Government stated that one of the aims of the Agreement was the reduction of the Canada-U.S. vehicle price differential. This has in fact happened for the 1966 and 1967 models; Canadian car prices were decreased in 1965-66 but were increased again in 1966-67. The way that prices move in the future will reflect costs and profit margins. Unfortunately data on both these aspects is not forthcoming. A forecast may be made, however, for the price differential between Canadian and U.S. vehicles: the U.S. industry has had a history of almost constant price combined with steadily increasing unit gross margins. The Canadian unit gross margins, on the other hand, after

the recession of 1961 have been lower, even while price has increased substantially during the boom period after 1961. This does not augur well for the future ability of the Canadian industry to reduce the price differential with the U.S.

In summary it appears that the rationalization of the industry will take place with expansion of some firms and contraction of others; that production and employment will increase, depending on economic conditions; that it is by no means clear that increased Canadian production will lead to such a large increase in productivity and reduction in average costs as to make the Canadian industry more competitive than it presently is; that the evidence on productivity and costs does not lead one to believe that a continued reduction of the price differential will be forthcoming.

The conclusions of this thesis are based on the available statistics. At numerous stages in the thesis it has been obvious that there is a real need for the industry to publish statistics for research purposes, particularly with respect to the Canadian branch operations of international companies.

APPENDICES

APPENDIX A

AGREEMENT CONCERNING AUTOMOTIVE PRODUCTS BETWEEN THE GOVERNMENT OF CANADA AND THE GOVERNMENT OF THE UNITED STATES OF AMERICA

The Government of Canada and the Government of the United States of America,

Determined to strengthen the economic relations between their two countries;

Recognizing that this can best be achieved through the stimulation of economic growth and through the expansion of markets available to producers in both countries within the framework of the established policy of both countries of promoting multilateral trade;

Recognizing that an expansion of trade can best be achieved through the reduction or elimination of tariff and all other barriers to trade operating to impede or distort the full and efficient development of each country's trade and industrial potential;

Recognizing the important place that the automotive industry occupies in the industrial economy of the two countries and the interests of industry, labour and consumers in sustaining high levels of efficient production and continued growth in the automotive industry;

Agree as follows:

Article I

The Governments of Canada and the United States, pursuant to the above principles, shall seek the early achievement of the following objectives:

(a) The creation of a broader market for automotive products within which the full benefits of specialization and large-scale production can be achieved;

(b) The liberalization of United States and Canadian automotive trade in respect to tariff barriers and other factors tending to impede it, with a view to enabling the industries of both countries to participate on a fair and equitable basis in the expanding total market of the two countries;

(c) The development of conditions in which market forces may operate effectively to attain the most economic pattern of investment, production and trade.

It shall be the policy of each Government to avoid actions which would frustrate the achievement of these objectives.

Article II

(a) The Government of Canada, not later than the entry into force of the legislation contemplated in paragraph (b) of this Article, shall accord duty-free treatment to imports of the products of the United States described in Annex A.

(b) The Government of the United States, during the session of the United States Congress commencing on January 4, 1965, shall seek enactment of legislation authorizing duty-free treatment of imports of the products of Canada described in Annex B. In seeking such legislation, the Government of the United States shall also seek authority permitting the implementation of such duty-free treatment retroactively to the earliest date administratively possible following the date upon which the Government of Canada has accorded duty-free treatment. Promptly after the entry into force of such legislation, the Government of the United States shall accord duty-free treatment to the products of Canada described in Annex B.

Article III

The commitments made by the two Governments in this Agreement shall not preclude action by either Government consistent with its obligations under Part II of the General Agreement on Tariffs and Trade.

Article IV

(a) At any time, at the request of either Government, the two Governments shall consult with respect to any matter relating to this Agreement.

(b) Without limiting the foregoing, the two Governments shall, at the request of either Government, consult with respect to any problems which may arise concerning automotive producers in the United States which do not at present have facilities in Canada for the manufacture of motor vehicles, and with respect to the implications for the operation of this Agreement of new automotive producers becoming established in Canada.

(c) No later than January 1, 1968, the two Governments shall jointly undertake a comprehensive review of the progress made towards achieving the objectives set forth in Article I. During this review the Government shall consider such further steps as may be necessary or desirable for the full achievement of these objectives.

Article V

Access to the Canadian and United States markets provided for under this Agreement may by agreement be accorded on similar terms to other countries.

Article VI

This Agreement shall enter into force provisionally on the date of signature and definitively on the date upon which notes are exchanged between the two Governments giving notice that appropriate action in their respective legislatures has been completed.

Article VII

This Agreement shall be of unlimited duration. Each Government shall, however, have the right to terminate this Agreement twelve months from the date on which that Government gives written notice to the other Government of its intention to terminate the Agreement.

DONE in duplicate at Johnson City, Texas, this 16th day of January, 1965, in English and in French, the two texts being equally authentic.

IN WITNESS WHEREOF THE representatives of the two Governments have signed this Agreement.

FAIT en double exemplaire a Johnson City, Texas le 16 janvier 1965, en français et en anglais, les deux textes faisant egalement foi.

ENFOI DE QUOI les representants des deux gouvernements ont signe le present Accord.

For the Government of Canada:
Pour le Gouvernement du Canada:

Lester B. Pearson

Paul Martin

.....

For the Government of the U. S. A.
Pour le Gouvernement des Etats-Unis d'Amerique

Lyndon B. Johnson

Dean Rusk

.....

ANNEX A

1. (1) Automobiles, when imported by a manufacturer of automobiles.

(2) All parts, and accessories and parts thereof, except tires and tubes, when imported for use as original equipment in automobiles to be produced in Canada by a manufacturer of automobiles.

(3) Buses, when imported by a manufacturer of buses.

(4) All parts, and accessories and parts thereof, except tires and tubes, when imported for use as original equipment in buses to be produced in Canada by a manufacturer of buses.

(5) Specified commercial vehicles, when imported by a manufacturer of specified commercial vehicles.

(6) All parts, and accessories and parts thereof, except tires, tubes and any machines or other articles required under Canadian tariff item 438a to be valued separately under the tariff items regularly applicable thereto, when imported for use as original equipment in specified commercial vehicles to be produced in Canada by a manufacturer of specified commercial vehicles.

2. (1) "Automobile" means a four-wheeled passenger automobile having a seating capacity for not more than ten persons;

(2) "Base year" means the period of twelve months commencing on the 1st day of August, 1963 and ending on the 31st day of July, 1964;

(3) "Bus" means a passenger motor vehicle having a seating capacity for more than 10 persons, or a chassis therefor, but does not include any following vehicle or chassis therefor, namely an electric trackless trolley bus, amphibious vehicle, tracked or half-tracked vehicle or motor vehicle designed primarily for off-highway use;

(4) "Canadian value added" has the meaning assigned by regulations made under section 273 of the Canadian Customs Act;

(5) "Manufacturer" of vehicles of any following class, namely automobiles, buses or specified commercial vehicles, means, in relation to any importation of goods in respect of which the description is relevant, a manufacturer that

(i) produced vehicles of that class in Canada in each of the four consecutive three months' periods in the base year, and

(ii) produced vehicles of that class in Canada in the period of twelve months ending on the 31st day of July in which the importation is made,

(A) the ratio of the net sales value of which to the net sales value of all vehicles of that class sold for consumption in Canada by the manufacturer in that period is equal to or higher than the ratio of the net sales value of all vehicles of that class produced in Canada by the manufacturer in the base year to the net sales value of all vehicles of that class sold for consumption in

Canada by the manufacturer in the base year, and is not in any case lower than seventy-five to one hundred; and

(B) the Canadian value added of which is equal to or greater than the Canadian value added of all vehicles of that class produced in Canada by the manufacturer in the base year;

(6) "Net sales value" has the meaning assigned by regulations made under section 273 of the Canadian Customs Act; and

(7) "Specified commercial vehicle" means a motor truck, motor truck chassis, ambulance or chassis therefor, or hearse or chassis therefor, but does not include:

(a) any following vehicle or chassis designed primarily therefor, namely a bus, electric trackless trolley bus, amphibious vehicle, tracked or half-tracked vehicle, golf or invalid cart, straddle carrier, motor vehicle designed primarily for off-highway use, or motor vehicle specially constructed and equipped to perform special services or functions, such as, but not limited to, fire engine, mobile crane, wrecker, concrete mixer or mobile clinic; or

(b) any machine or other article required under Canadian tariff item 438a to be valued separately under the tariff item regularly applicable thereto.

3. The Government of Canada may designate a manufacturer not falling within the categories set out above as being entitled to the benefit of duty-free treatment in respect of the goods described in this Annex.

ANNEX B

(1) Motor vehicles for the transport of persons or articles as provided for in items 692.05 and 692.10 of the Tariff Schedules of the United States and chassis therefor, but not including electric trolley buses, three-wheeled vehicles, or trailers accompanying truck tractors, or chassis therefor.

(2) Fabricated components, not including trailers, tires, or tubes for tires, for use as original equipment in the manufacture of motor vehicles of the kinds described in paragraph (1) above.

(3) Articles of the kinds described in paragraphs (1) and (2) above include such articles whether finished or unfinished but do not include any article produced with the use of materials imported into Canada which are products of any foreign country (except materials produced within the customs territory of the United States), if the aggregate value of such imported materials when landed at the Canadian port of entry, exclusive of any landing cost and Canadian duty, was

(a) with regard to articles of the kinds described in paragraph (1), not including chassis, more than 60 per cent until January 1, 1968, and thereafter more than 50 per cent, of the appraised customs value of the article imported into the customs territory of the United States; and

(b) with regard to chassis of the kinds described in paragraph (1), and articles of the kinds described in paragraph (2), more than 50 per cent of the appraised customs value of the article imported into the customs territory of the United States.

APPENDIX B

AUTOMOTIVE PROGRAM - SUMMARY OF LETTERS OF AGREEMENT

Following is a summary of letters from General Motors Canada Limited, The Ford Motor Company of Canada Limited and Chrysler Canada Limited, addressed to the Minister of Industry, undertaking to achieve a substantial expansion in automotive production in Canada. These letters were tabled in the House of Commons today, April 26, 1965.

In the letters, the companies welcome the Canada - United States Automotive Agreement which seeks the early achievement of the following objectives:

(a) The creation of a broader market for automotive products within which the benefits of specialization and large-scale production can be achieved;

(b) The liberalization of United States and Canadian automotive trade in respect of tariff barriers and other factors tending to impede it, with a view to enabling the industries of both countries to participate on a fair and equitable basis in the expanding total market of the two countries;

(c) The development of conditions in which market forces may operate effectively to attain the most economic pattern of investment, production and trade.

The companies undertake to fulfill the following objectives in accordance with tariff item 950:

(a) To maintain at least the same ratio of production of cars to sales of cars in Canada as prevailed during model year 1964. Thus, as the market grows, production

of finished cars in Canada must also expand proportionately.

(b) To maintain in the production of vehicles a Canadian value added equal to or greater than that attained in model year 1964.

In addition, the companies have undertaken to expand production in the following manner:

1. To increase in each model year over the preceding model year, the dollar value of Canadian value added in the production of vehicles and original equipment parts by an amount equal to 60% of the growth in the market for automobiles sold by each company for consumption in Canada, and;

2. To increase the dollar value of Canadian value added in the production of vehicles and original equipment parts, over and above that achieved during model year 1964, by an amount of $260 million annually. The larger commitments included in this amount are General Motors which undertakes to achieve $121 million, Ford $74 million and Chrysler $33 million. The full amount of this annual increase is to be achieved during the model year beginning in August 1967.

Each company has also agreed to report to the Minister of Industry, every three months, such information as the Minister requires pertaining to progress being achieved to fulfill the companies obligations.

The undertakings by the companies to the Government will result in an increase in Canadian automotive production of more than one third

over the level of the base year (1964), exclusive of growth in the market. If the present rapid rate of growth in the market for North American cars continues, the total expansion in Canadian production for the model year beginning in August 1967 will exceed production levels achieved in 1964 by more than 50%. This will greatly increase employment in the Canadian automotive industries and the demand for Canadian materials and services.

General Motors of Canada, Limited,
Oshawa, Ontario,
Office of President and General Manager,
January 13, 1965.

Honourable C. M. Drury,
Minister of Industry,
Parliament Buildings,
Ottawa, Ontario.

Dear Mr. Minister:

This letter is in response to your request for a statement with respect to the proposed agreement between the Governments of Canada and the United States concerning trade and production in automotive products, as you have described it to us. The following comments assume that the proposed agreement for duty-free treatment has the full support of the respective Governments, and that the program may be expected to continue for a considerable period of time.

It is our understanding that the important objectives of the inter-governmental Agreement are as follows: (a) the creation of a broader market for automotive products within which the full benefits of specialization and large-scale production can be achieved: (b) the liberalization of United States and Canadian automotive trade in respect of tariff barriers and other factors tending to impede it, with a view to enabling the industries of both countries to participate on a fair and equitable basis in the expanding total market of the two countries; (c) the development of conditions in which market forces may operate effectively to attain the most economic pattern of investment, production and trade. We subscribe to these objectives and agree with the suggested approach of removing tariff barriers and moving in the direction of free trade even in this limited area. Such an approach is fully compatible with General Motors' expressed position with respect to the desirability of free trade in automotive vehicles and components, not only in Canada, but in all other countries in the free world.

It is noted that under the proposed agreement the right to import vehicles and certain automotive parts, free of duty, into Canada will be available to Canadian vehicle manufacturers who (1) maintain Canadian value added in the production of motor vehicles in ensuing model years at not less than the Canadian value added in motor vehicle production in the 1964 model year, (2) produce motor vehicles in Canada having a net factory sales value in a ratio to total net factory sales value of their motor vehicle sales in Canada

and those of their affiliated companies in Canada of not less than the ratio prevailing during the 1964 model year, (3) increase in each ensuing model year over the base model year, Canadian value added in the production of vehicles and original equipment parts by an amount equal to 60% of the growth in their market for automobiles sold for consumption in Canada and by an amount equal to 50% of the growth in their market for commercial vehicles sold for consumption in Canada, (for this purpose, growth in their market means the difference between the cost of vehicles sold in Canada during the ensuing model year and the cost of vehicles sold in Canada during the base model year net of federal sales tax in both cases) and (4) undertake, in addition to meeting the above three conditions, to achieve a stipulated increase in the annual Canadian value added by the end of the model year 1968.

With respect to General Motors, in connection with the conditions outlined in the previous paragraph, it is our understanding, in the case of (1) that Canadian value added would be decreased in circumstances where the value of General Motors sales declined below that achieved in the base year, and in the case of (3) that in the event of a decline in General Motors net value of vehicle sales for consumption in Canada, a decrease in Canadian value added to 60% and 50% in cars and trucks respectively is acceptable. In addition, it is our understanding with respect to (4), that for General Motors the stipulated annual increase in the Canadian value added by the end of the model year 1968 is $121 million.[1]

We understand that certain changes are proposed in the regulations pertaining to the determination of Canadian value added. We believe that several of these changes require further review and consideration as in our opinion they tend to impede rather than aid in the attainment of the objectives of the agreement.

In particular, these are: (A) the elimination of the profit on components purchased from affiliated Canadian companies, (B) the elimination of profit on sales of vehicles and parts by General Motors of Canada or by Canadian affiliated companies to affiliated companies outside of Canada, and (C) the elimination of depreciation on non-Canadian facilities used in the manufacturing process both in our plants and in those of our Canadian suppliers.

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[1] Author's comment on G.M.'s undertaking: G. M. means that, by the end of the 1968 model, annual rate of C.V.A. will be $121 million and will be maintained at this annual rate in future years. In addition, G. M. has to increase C.V.A. by $121 million over the normal market growth rate, in the period from the institution of the Agreement to the end of the 1968 model year.

A. We believe that the elimination of the profit element on purchases of components purchased by General Motors of Canada from affiliated Canadian companies is discriminatory. McKinnon Industries, a major supplier of components, has been an affiliate of ours since 1929. McKinnon prices to us are competitive with those for similar components manufactured by other manufacturers. It is a policy of General Motors that pricing between affiliated operations be competitive and the purchasing unit has the obligation of negotiating the best possible price with the supplying unit. McKinnon and other affiliated Canadian parts manufacturers supply parts to other Canadian vehicle manufactueres and the profit on these transactions is not required to be eliminated by those manufacturers. We feel that at most any elimination of profit from value added should be confined to the elimination of profit above the percentage level in the base period.

B. It is our opinion that the elimination of the profit on sales of vehicles and parts produced in Canada by General Motors of Canada and affiliated Canadian companies to affiliated General Motors companies in the United States and other countries is also discriminatory and should be given added consideration. It is recognized in the tariff regulations of most countries that the value of imported goods includes a "reasonable" rate of profit. Further, on sales by non-affiliated Canadian suppliers to General Motors Corporation in the United States and its overseas subsidiaries the profit in such sales would be considered as Canadian value added.

C. On the matter of exclusion of depreciation on non-Canadian machinery and equipment used in the production of automotive products in Canada, it seems that this only hinders the attainment of the objectives of the plan. In order to increase production in Canada, additional capacity is a necessity either in our plants or those of our suppliers. As much of this required equipment is either unavailable or more costly in Canada, it appears that not allowing depreciation on such equipment as Canadian value added discourages rather than encourages the enthusiasm required to effect the desired increase in Canadian value added. It should be noted, however, that it is our intention to maintain our present policy of obtaining any additional machinery and equipment in Canada whenever economically feasible.

You have requested that we should increase Canadian value added in our products by $121 million between 1964 and the end of the model year 1968, as outlined under condition (4). Also you have requested that the amount should be further increased to the extent required under condition (3) stated above. We think that this objective in that time is extremely ambitious, particularly in view of the fact that one-half of the first model year has already passed.

We have carefully reviewed our situation in the light of your proposals and requests and have asked that our affiliates do the same. We can see areas where we can and will achieve a significant portion of your suggested objective of $121 million increase in Canadian value added by 1968. This is possible because General Motors of Canada and our affiliated Canadian companies have recently engaged in the Canadian manufacture of certain automotive components heretofore imported. These include the fabrication and assembly of automatic transmissions at McKinnon Industries Windsor plant not only for Canadian requirements but for export to assembly plants in other countries as well. In addition, in the 1964 model year the overseas market for North American-type passenger cars and commercial vehicles has been increasingly served by our plants in Canada. Of course, any slowing down in the rate of growth in the industry or any adverse developments in the economies of Canada, the United States or other principal markets, or failure to achieve duty-free entry into the United States, would make this achievement more difficult.

To attain your stated objective rateably over the four years of the plan amounts to an increase in Canadian value added of $30 million a year plus growth. Our plans, which have been under way for more than a year, should accomplish about $60 million of the total or, putting it another way, we can see our way clear to accomplish that portion applicable to the first two years of the plan.

Studies are under way of various steps we might take to accomplish that portion applicable to the last two years. However, we are and have been operating our facilities in Canada at full capacity, and so, I believe, have most of our suppliers. Therefore, the Canadian value added applicable to the last two years will probably require added facilities on our part, or on the part of our suppliers or both. A further reappraisal of our present facilities and our capacity and those of our suppliers must be made. The extent and nature of any additional facilities can be determined only in the list of the plan as finally published. You can appreciate, I am sure, that all of this takes time.

Subject to the imponderables mentioned above, it is our intention and that of our affiliates to make every feasible effort to meet the objectives of the agreement to be made between the Governments of Canada and the United States, and to achieve the indicated goal as rapidly as possible.

Referring again to the items which appear to impede the program, we hope you will review your position further in the light of the information included earlier in this letter.

In conclusion, therefore, I am prepared to say at this time that: first, General Motors of Canada has plans under way to increase Canadian value added by about $30 million in each of the first two years of the plan; and second, we are continuing our studies of ways to accomplish the remainder of the program and will undertake to meet the full objective of $121 million by the end of the model year 1968.

It is anticipated that these studies will take between three and four months to finish, and I will be prepared to discuss the results with you when they are completed. From time to time, as requested, we will be glad to discuss our current operations and our plans for future development with the Minister of Industry, and to receive and consider his suggestions.

Sincerely,

E. H. Walker

Ford Motor Company of Canada Limited,
Central Office,
The Canadian Road,
Oakville, Ontario.
January 14, 1965.

Dear Mr. Minister:

Enclosed are executed copies of our two letters to you of this date relative to the proposed agreement between the Governments of Canada and the U. S. concerning trade and production in automotive products under which it is proposed that the customs duty in each country on the importation from the other of automotive vehicles and original equipment parts therefor be eliminated.

We consider it essential that any substantial administrative interpretation or treatment that may be extended by you to any other motor vehicle manufacturer, the lack of which would place Ford Motor Company in a non-competitive position, also be extended to Ford.

You have provided us with a draft of the proposed Order-In-Council expected to be adopted in order to implement that agreement and with a draft of the regulations proposed to be adopted under that Order-In-Council.

Our undertakings are, of course, conditional upon the execution of that agreement, upon the adoption of an Order-In-Council, and regulations substantially in the form of the drafts that you have already delivered to us, and upon an acceptable response in respect of the enclosed supplementary letter.

Yours sincerely,

FORD MOTOR COMPANY OF CANADA, Limited

By_____
K. E. Scott, President

Ford Motor Company of Canada Limited,
Central Office,
The Canadian Road,
Oakville, Ontario,
January 14, 1965.

Dear Mr. Minister:

We are writing with respect to the Agreement between the Government of Canada and the United States concerning production and trade in automotive products.

Ford Motor Company of Canada, Limited welcomes the Agreement and supports its objectives. In this regard, our Company notes that the Governments of Canada and the United States have agreed ". . . that any expansion of trade can best be achieved through the reduction or elimination of tariff and all other barriers to trade operating to impede or distort the full and efficient development of each country's trade and industrial potential . . .". In addition, we note that the Governments of Canada and the United States ". . . shall seek the early achievement of the following objectives:

(a) The creation of a broader market for automotive products within which the full benefits of specialization and large-scale production can be achieved;

(b) The liberalization of United States and Canadian automotive trade in respect of tariff barriers and other factors tending to impede it, with a view to enabling the industries of both countries to participate on a fair and equitable basis in the expanding total market of the two countries;

(c) The development of conditions in which market forces may operate effectively to attain the most economic pattern of investment, production and trade."

Our Company also notes that the right to import motor vehicles and original equipment parts into Canada under the Agreement is available to vehicle manufacturers in Canada who meet the conditions stipulated in the Motor Vehicles Tariff Order 1965. These conditions are, in brief, that vehicle manufacturers shall maintain in each model year their production of motor vehicles in Canada in the same ratio to sales of motor vehicles for consumption in Canada and the same dollar value of Canadian value added in the production of motor vehicles in Canada, as in the period August 1, 1963 to July 31, 1964.

We understand that:

(i) in ascertaining whether Ford qualifies as a motor vehicle manufacturer and whether the requirements of paragraphs 1 and 2, below, are satisfied, production of automotive vehicles in Canada by Ford Motor Company of Canada, Limited and by any person designated as associated with Ford Motor Company of Canada, Limited ("an associated person") will be taken into account, whether sold in Canada or exported;

(ii) in determining whether the requirements of paragraphs 1 and 2, below, are satisfied, export sales of original equipment parts by Ford Motor Company of Canada, Limited and by any associated person in Canada (as well as production of automotive vehicles in Canada by Ford Motor Company of Canada, Limited and by any associated person, whether sold in Canada or exported), and purchases of original equipment parts by any affiliated Ford Company outside of Canada from Canadian vendors, will be taken into account. An "affiliated Ford Company" is one that controls, or is controlled by, or is under common control with, Ford Motor Company of Canada, Limited.

(iii) for the purpose of computing the ratios referred to in paragraph 2(1) (e) (ii) (A) of the Order-In-Council of the definition of manufacturer, the numerators of the fractions will consist of the net sales value of all passenger automobiles (or specified commercial vehicles or busses) produced by the motor vehicle manufacturer in Canada, including those sold in Canada and those sold in export, and the denominators of the fractions will consist of the net sales value of all passenger automobiles (or of specified commerical vehicles or busses) sold by the motor vehicle manufacturer for consumption in Canada, including imported passenger cars (or specified commerical vehicles or busses) but excluding passenger cars (or specified commercial vehicles or busses) that are produced by the motor vehicle manufacturer in Canada and sold in export.

The undertakings in this letter are based on the definition of "Canadian value added" in your present regulations.

We understand that in the computation of Canadian value added for vehicle assembly in Canada, Section 2 (a) (i) of the Regulations would prevent us from including the cost of parts produced in Canada that are exported from Canada and subsequently imported into Canada as components of original equipment parts; this provision reduces the

incentive to source in Canada parts that would be incorporated in U. S. engines and other original equipment parts. Accordingly, we request that you give careful consideration to the revision of this clause.

In addition to meeting these stipulated conditions and in order to contribute to meeting the objectives of the Agreement, Ford Motor Company of Canada, Limited undertakes:

1. To increase in each model year over the preceding model year Canadian value added in the production of vehicles and original equipment parts by an amount equal to 60% of the growth in the market for automobiles sold by our Company for consumption in Canada and by an amount equal to 50% of the growth in the market for the commerical vehicles specified in Tariff Item 950 sold by our Company for consumption in Canada, it being understood that in the event of a decline in the market a decrease in Canadian value added based on the above percentages is acceptable. For this purpose, growth or decline in the market shall be measured as the difference between the cost to our Company of vehicles sold in Canada during the current model year and the cost to our Company of vehicles sold in Canada during the preceding model year net of federal sales taxes in both cases.

   We understand that in the event that the total passenger car and/or total truck sales of our Company in any model year fall below the total passenger car and/or total truck sales of our Company during the base period, Canadian value added requirements would be reduced below the base period amounts for the purpose of this section, and for the conditions stipulated in the Motor Vehicles Tariff Order 1965.

   We believe that the definition of growth is unfair because it includes as growth the difference between the cost of vehicles produced in Canada and the cost to us of identical imported vehicles. In the event that we rationalize our vehicle production in Canada so as to concentrate our production in Canada on high volume models for the North American market with other models being imported, the difference in cost as defined above would result in a substantial growth even though there was no change in the number and models of vehicles sold in Canada. We request your careful consideration of a change in the definition that would eliminate this inequity. This inequity is compounded by the fact that Ford Motor Company of Canada, Limited is compelled by the Canadian Anti-Dumping Law to import vehicles at

dealer price, and we request that your Government also give careful consideration to a change in the Anti-Dumping Law in respect to vehicles imported under the Motor Vehicles Tariff Order 1965.

2. To increase Canadian value added over and above the amount that we achieved in the period August 1, 1963 to July 31, 1964 and that which we undertake to achieve in (1) above, by an amount of $74.2 million during the period August 1, 1967 to July 31, 1968.

The undertakings given in this letter are to be adjusted to the extent necessary for conditions not under the control of the Ford Motor Company of Canada, Limited, or of any affiliated Ford Company, such as acts of God, fire, earthquake, strikes at any plant owned by Ford or by any of our suppliers, and war.

The Ford Motor Company of Canada, Limited also agree to report to the Minister of Industry, every three months beginning April 1, 1965, such information as the Minister of Industry requires pertaining to progress achieved by our Company, as well as plans to fulfill our obligations under this letter. In addition, Ford Motor Company of Canada, Limited understands that the Government will conduct an audit each year with respect to the matters described in this letter.

We understand that before the end of the model year 1968 we will need to discuss together the prospects for the Canadian automotive industry and our Company's program.

Yours sincerely,

FORD MOTOR COMPANY OF CANADA, Limited

By_____
K. E. Scott, President

Ford Motor Company of Canada, Limited,
Central Officer,
The Canadian Road,
Oakville, Ontario.
January 14, 1965.

Dear Mr. Minister:

I wish to bring to your attention a matter of major importance to the Ford Motor Company which will affect the ability of the Company to participate under the Motor Vehicle Tariff Order 1965.

You will recall that our Company and its parent, Ford Motor Company, have made commitments to spend in excess of $50 million to increase production of a limited range of automotive engines in Canada for use in our Canadian plants and for export to the U.S. This plan provides for greatly expanded production of engines in Canada, thus making possible substantial cost savings. The production of certain engines now produced in short high-cost runs will be discontinued in Canada but will be imported as required.

As a result of this plan, the contribution of engines to our Canadian value added in the production of motor vehicles in Canada in the 1966 model year and subsequent years, will be substantially reduced below the amount contributed by engines in the 1964 model year. The total Canadian value added of our engine operations for domestic use and for export will, however, be increased substantially over our actual value added of engine production in the 1964 model year. For the purpose of the definition of a motor vehicle manufacturer, however, our value added in Canada in the production of motor vehicles in Canada in the base year may experience a short fall of approximately $22 million. Regardless of this possibility, our total Canadian value added will be maintained at the level of our basic undertaking set forth in paragraph 2 of our letter of January 14, 1965.

Should the total Canadian value added in Ford's vehicle assembly in Canada in any model year fall below the level prevailing in model year 1964, Ford undertakes to purchase an additional amount over the amount purchased in the base year of automotive components from Canadian vendors who are not affiliated with a vehicle manufacturer, which is equal to the short fall in Canadian value added below the level achieved in model year 1964.

This undertaking is conditional upon the Ford Motor Company of Canada, Limited being accorded the same tariff treatment it would receive as if it qualified under the Motor Vehicle Tariff Order 1965.

Yours sincerely,

FORD MOTOR COMPANY OF CANADA, Limited

By_____
K. E. Scott, President

Ron W. Todgham,
President,
Chrysler Canada Ltd.,
January 13, 1965.

The Honourable C. M. Drury,
Minister of Industry,
Ottawa, Canada.

Dear Mr. Minister:

I am writing with respect to the Agreement between the Governments of Canada and the United States concerning production and trade in automotive products.

Chrysler Canada Ltd. welcomes the Agreement and supports its objectives. In this regard, our Company notes that the Governments of Canada and the United States have agreed ". . . that any expansion of trade can best be achieved through the reduction or elimination of tariff and all other barriers to trade operating to impeded or distort the full and efficient development of each country's trade and industrial potential . . .". In addition, we note that the Governments of Canada and the United States ". . . shall seek the early achievement of the following objectives:

(a) The creation of a broader market for automotive products within which the full benefits of specialization and large-scale production can be achieved;

(b) The liberalization of United States and Canadian automotive trade in respect of tariff barriers and other factors tending to impede it, with a view to enabling the industries of both countries to participate on a fair and equitable basis in the expanding total market of the two countries;

(c) The development of conditions in which market forces may operate effectively to attain the most economic pattern of investment, production and trade."

Our Company also notes that the right to import motor vehicles and original equipment parts into Canada under the Agreement is available to vehicle manufacturers in Canada who meet the conditions stipulated in the Motor Vehicles Tariff Order 1965.

These conditions are, in brief, that vehicle manufacturers shall maintain in each model year their domestic production of motor vehicles in the same ratio to their domestic sales of motor vehicles and the same dollar value of Canadian value added in the production of motor vehicles in Canada, as in the period August 1, 1963 to July 31, 1964.

In addition to meeting these stipulated conditions and in order to contribute to meeting the objectives of the Agreement, Chrysler Canada Ltd. undertakes:

1. To increase in each model year over the preceding model year, the dollar value of Canadian value added in the production of vehicles and original equipment parts by an amount equal to 60% of the growth in the market for automobiles sold by our Company for consumption in Canada and by an amount equal to 50% of the growth in the market for the commercial vehicles specified in Tariff Item 950 sold by our Company for consumption in Canada, it being understood that in the event of a decline in the market a decrease in such dollar value of Canadian value added in the above percentages is acceptable. For this purpose, growth or decline in the market shall be measured as the difference between the cost to our Company of vehicles sold in Canada during the current model year and the cost to our Company of vehicles sold in Canada during the preceding model year net of federal sales taxes in both cases, and

2. To increase the dollar value of Canadian value added in the production of vehicles and original equipment parts over and above the amount that we achieved in the period August 1, 1963 to July 31, 1964 and that which we undertake to achieve in (1) above, by an amount of $33 million during the period August 1, 1967 to July 31, 1968.

Chrysler Canada Ltd. also agrees to report to the Minister of Industry, every three months beginning April 1, 1965, such information as the Minister of Industry requires pertaining to progress achieved by our Company, as well as plans to fulfill our obligations under this letter. In addition, Chrysler Canada Ltd. understands that the Government will conduct an audit each year with respect to the matters described in this letter.

I understand that before the end of model year 1968 we will need to discuss together the prospects for the Canadian automotive industry and our Company's program.

Yours sincerely,

Ron Todgam

(signed)

R W T/ f

PRO FORMA LETTER RESPECTING COMPANY COMMITMENTS

JANUARY 14, 1965.

Hon. C. M. Drury,
Minister of Industry,
Parliament Building,
Ottawa, Canada.

DEAR MR. MINISTER: I am writing with respect to the agreement between the Governments of Canada and the United States concerning production and trade in automotive products.

The American Motors (Canada), Ltd., welcomes the agreement and supports its objectives. In this regard, our company notes that the Governments of Canada and the United States have agreed "* * * that any expansion of trade can best be achieved through the reduction or elimination of tariff and all other barriers to trade operating to impede or distort the full and efficient development of each country's trade and industrial potential * * *". In addition, we note that the Governments of Canada and the United States shall seek the early achievement of the following objectives:

(a) The creation of a broader market for automotive products within which the full benefits of specialization and large-scale production can be achieved;

(b) The liberalization of United States and Canadian automotive trade in respect to tariff barriers and other factors tending to impede it, with a view to enabling the industries of both countries to participate on a fair and equitable basis in the expanding total market of the two countries; and

(c) The development of conditions in which market forces may operate effectively to attain the most economic pattern of investment, production, and trade.

Our company also notes that the right to import motor vehicles and original equipment parts into Canada under the agreement is available to vehicle manufacturers in Canada who meet the conditions stipulated in the Motor Vehicles Tariff Order 1965. These conditions are, in brief, that vehicle manufacturers shall maintain in each model year their domestic production of motor vehicles in the same ratio to sales of motor vehicles and the same dollar value of Canadian value added in the production of motor vehicles in Canada, as in the period August 1, 1963, to July 31, 1964.

In addition to meeting these stipulated conditions and in order to contribute to meeting the objectives of the agreement, the American Motors (Canada) Ltd., undertakes:

1. To increase in each model year over the preceding model year, Canadian value added in the production of vehicles and original equipment parts by an amount equal to 60 per cent of

the growth in the market for automobiles specified in tariff item 950 sold by our company for consumption in Canada, it being understood that in the event of a decline in the market a decrease in Canadian value added in the above percentages is acceptable. For this purpose, growth or decline in the market shall be measured as the difference between the cost to our company of vehicles sold in Canada during the current model year and the cost to our company of vehicles sold in Canada during the preceding model year net of Federal sales taxes in both cases; and

2. To increase Canadian value added over and above the amount that we achieved in the period August 1, 1963, to July 31, 1964, and that which we undertake to achieve in (1) above, by an amount of $11,200,000 during the period August 1, 1967, to July 31, 1968.

The American Motors (Canada), Ltd., also agrees to report to the Minister of Industry, every 3 months beginning April 1, 1965, such information as the Minister of Industry requires pertaining to progress achieved by our company, as well as to fulfill our obligations under this letter. In addition, the American Motors (Canada), Ltd., understands that the Government will conduct an audit each year with respect to the matters described in this letter.

I understand that before the end of model year 1968 we will need to discuss together the prospects for the Canadian automotive industry and our company's program.

Yours sincerely,

EARL K. BROWNRIDGE,
President, American Motors (Canada), Ltd.

APPENDIX C

TARIFF ITEM 950 REGULATIONS

Following is the text of order in Council P.C. 1965-100, dated 16th January, 1965:

REGULATIONS RESPECTING THE ENTRY OF MOTOR VEHICLES UNDER THE MOTOR VEHICLES TARIFF ORDER, 1965.

SHORT TITLE.

1. These Regulations may be cited as the Tariff Item 950 Regulations.

INTERPRETATION.

2. In these Regulations all words and expressions have the meanings assigned to them by the Motor Vehicles Tariff Order, 1965, and for the purposes of these Regulations,

(a) "Canadian value added" means, in respect of vehicles of any following class, namely automobiles, buses or specified commercial vehicles, that are produced in Canada in any twelve month period ending the 31st day of July, the aggregate of the following costs to the manufacturer of producing all vehicles of that class that are produced in Canada by the manufacturer in that period and the following depreciation and capital allowances for that period:

(i) the cost of parts produced in Canada, and the cost of materials to the extent that they are of Canadian origin, that are incorporated in the vehicles in the factory of the manufacturer in Canada, or materials to the extent that they are of Canadian origin, that have been exported from Canada and subsequently imported into Canada as parts or materials.

(ii) trasportation costs, including insurance charges incurred in transporting parts and materials from a Canadian supplier or frontier port of entry to the factory of the manufacturer in Canada for incorporation in the vehicles, to the extent that such costs are not included under subparagraph (i),

(iii) notwithstanding subparagraph (i), the cost of the iron, steel and aluminum content of parts produced outside Canada for incorporation into the vehicles, if the iron, steel or aluminum was poured in Canada, to the extent that such cost does not exceed the amount of the manufacturer was allowed in respect of such materials for vehicles of that class for the

base year under the Tariff Item 438c Regulations or Tariff Item 438(d) and 438(e) Regulations.

(iv) such part of the following costs as are reasonably attributable to the production of the vehicles:

(A) wages paid for direct production labour in Canada,

(B) wages paid for indirect production and non-production labour in Canada,

(C) materials used in the production operation but not incorporated in the final product,

(D) light, heat, power and water,

(E) workmen's compensation, unemployment insurance and group insurance premiums, pension contributions and similar expenses incurred in respect of labour referred to in clauses (A) and (B),

(F) taxes on land and buildings in Canada,

(G) fire and other insurance premiums relative to production inventories and the production plant and its equipment, paid to a company authorized by the laws of Canada or any province to carry on business in Canada or such province,

(H) rent for factory paid to a beneficial owner in Canada,

(I) maintenance and repairs to buildings, machinery and equipment used for production purposes that is executed in Canada,

(J) tools, dies, jigs, fixtures and other similar plant equipment items of a non-permanent character that have been manufactured in Canada,

(K) engineering services, experimental work and product development work executed in Canada, and

(L) miscellaneous factory expenses,

(v) administrative and general expenses incurred in Canada that are reasonably attributable to the production of the vehicles,

(vi) depreciation in respect of production machinery and permanent plant equipment and the installation costs of such machinery and equipment as authorized by section 4, to the extent that such depreciation is reasonably attributable to the production of the vehicles, and

(vii) a capital allowance not exceeding five per cent of the total capital outlay incurred by the manufacturer for land and buildings in Canada owned by the manufacturer and used by the manufacturer in the production of vehicles or parts (not including any capital outlay incurred by a person deemed by subsection (3) of section 2 of the Order in the period not to be a separate person but to be one and the same person as the manufacturer) to the extent that such allowance is reasonably attributable to the production of the vehicles;

(b) "Canadian value added" means, in respect of parts, the aggregate of those costs of producing the parts and those depreciation and capital allowances that would be included in the calculation of Canadian value added if the parts were vehicles;

(c) "net sales value" means, in respect of any vehicle, the selling price received by the manufacturer for the vehicle, including costs of transporting the vehicle in Canada but not including any other costs of transportation or delivery charges, minus

(i) federal sales and excise taxes paid in respect of the vehicle and any parts thereof, and

(ii) rebates, commissions, discounts and other allowances granted by the manufacturer subsequent to the sale in respect of the vehicle;

(d) "Order" means the Motor Vehicles Tariff Order, 1965; and

(e) "parts" includes accessories for vehicles and parts of such accessories, but does not include parts or accessories or parts thereof for repair or replacement purposes.

3. (1) For the purposes of subparagraph (i) of paragraph (a) of section 2,

(a) the cost of parts and materials acquired by a manufacturer from its parent corporation, or from any subsidiary wholly-owned corporation or subsidiary controlled corporation of the manufacturer or of its parent corporation shall be deemed to be the Canadian value added of the parts and the cost to such corporation of the materials to the extent that they are of Canadian origin;

(b) the cost of parts and materials acquired by a manufacturer from a supplier other than a corporation described in paragraph (a) shall be deemed to be the selling price of the parts and materials to the manufacturer less the duty paid value of imported goods used in the production thereof and foreign charges applicable thereto;

(c) subject to paragraph (d), iron, stell and aluminum that has been poured in Canada shall be deemed to be wholly Canadian origin; and

(d) parts acquired by a manufacturer shall be deemed to be produced outside Canada and materials acquired by a manufacturer shall be deemed to be of non-Canadian origin, except any such parts and materials acquired from a supplier in Canada in respect of which the manufacturer has obtained from the supplier a certificate in form prescribed by the Minister stating

(i) in the case of parts and materials acquired by the manufacturer from a corporation described in paragraph (a), the Canadian value added of the parts and the cost to that corporation of the materials to the extent that they are of Canadian origin, and

(ii) in the case of parts and materials acquired by the manufacturer from a supplier other than a corporation described in paragraph (a), the cost thereof as calculated in accordance with paragraph (b).

(2) In subsection (1),

(a) "manufacturer" does not include a person deemed by subsection (3) of section 2 of the Order not to be a separate person but to be one and the same person as the manufacturer; and

(b) "subsidiary wholly-owned corporation" and "subsidiary controlled corporation" have the meanings assigned to those expressions by the Income Tax Act.

4. For the purpose of subparagraph (vi) of paragraph (a) of section 2, the amount of depreciation in respect of production machinery and permanent plant equipment for any twelve month period ending on the 31st day of July is,

(a) in the case of machinery and equipment acquired before August 1, 1964 and within the one hundred and twenty months ending on the last day of the period, ten per cent of either

(i) the aggregate of

(A) the capital cost to the manufacturer of any such machinery and equipment that was manufactured in Canada, and

(B) the part of the capital cost to the manufacturer of any such machinery and equipment that was manufactured outside Canada that is reasonably attributably to the cost of installing that machinery and equipment,

minus

(C) the part of the costs referred to in clauses (A) and (B) that was incurred in respect of machinery and equipment that has been disposed of before the beginning of the period, or

(ii) one-half of

(A) the capital cost to the manufacturer of all such machinery and equipment whether manufactured in Canada or elsewhere,

minus

(B) the part of the cost referred to in clause (A) that was incurred in respect of machinery and equipment that has been disposed of before the beginning of the period; and

(b) in the case of machinery and equipment acquired after July 31, 1964 and within the one hundred and twenty months ending on the last day of the period, ten per cen of

(i) the capital cost to the manufacturer of any such machinery and equipment that was manufactured in Canada, and

(ii) the part of the capital cost to the manufacturer of any such machinery and equipment that was manufactured outside Canada that is attributable to the cost of installing that machinery and equipment,

minus

(iii) the part of the costs referred to in subparagraph (i) and (ii) that was incurred in respect of machinery and equipment that has been disposed of before the beginning of the period.

DECLARATION.

5. Every manufacturer that intends to enter vehicles under Tariff Item 950 during any twelve month period ending on the 31st day of July shall, before making its first entry during the period, send to the Minister a declaration in the form set out in the Schedule in respect of each class of vehicle it intends so to enter.

REPORTS.

6. Every manufacturer that imports vehicles pursuant to the Order shall submit to the Minister and the Minister of Industry every three months

commencing April 1, 1965, such reports as may be required by those Ministers respecting the production and sale by the manufacturer of vehicles and parts thereof.

ADMINISTRATION OF THE MOTOR VEHICLES TARIFF ORDER 1965 AND REGULATIONS

1. The respective tariff designation under the Order are 950(1), 950(2), 950(3), 950(4), 950(5), and 950(6). These tariff items and regulations come into effect on 18th January 1965.

2. To be entitled to duty free entry under these tariff items:

(a) automobiles, buses and specified commercial vehicles

(i) must be imported by a manufacturer of the vehicle in question, and

(ii) must be entered on the prescribed entry from;

(b) parts, accessories and parts thereof

(i) may be imported by a manufacturer of the vehicle in question, by a parts manufacturer or by suppliers to a manufacturer,

(ii) must be for use as original equipment in vehicles produced in Canada by a manufacturer of such vehicles, and

(iii) must be entered on the prescribed entry form.

Note: Until otherwise determined, end-use certificates will not be required at time of importation.

3. The entry prescribed by the Minister, pursuant to section 124 of the Customs Act and the Motor Vehicles Tariff Order 1965, is the regular B 1 Entry Form issued in a pink colour with the word "Special" indicated thereon in the upper left-hand corner.

Until such time as the special entry form has been printed, the regular B 1 Entry Form may be accepted, provided that the word "Special" is typed, stamped or over-printed in the upper left-hand corner of all copies thereof. It is expected that the special entry form will be in general use by 1st May, 1965.

The B 1 Special should be submitted in triplicate, as in the case of regular entries.

4. In accordance with the requirements of section 105(1) of the Customs Act, goods claimed to be exempt from duty under tariff item 950 must, in the entry thereof, be described and set forth in the words by which they are described in the applicable part of the item.

5. While it is preferable to restrict the use of the B 1 Special entry form to goods cleared under tariff item 950, other goods covered by the same invoice, but not qualifying under the item, may also be cleared on the same entry form, if desired.

6. Parts, accessories and parts thereof, imported for repair or replacement purposes, are not entitled to entry under tariff item 950. Warranty parts are considered as replacement parts. Materials also do not qualify for entry under the item.

7. Goods released on Form C 9 prior to 18th January, 1965 may not be entered under tariff item 950. Goods released on Form C 9 and goods taken out of warehouse, on and after 18th January, 1965 may be entered under tariff item 950, if otherwise qualified.

8. The valuation provisions of the Customs Act and the special duty provisions of the Customs Tariff Act will apply in the regular way to goods for which entry is claimed free of duty under tariff item 950.

9. Goods which have been entered other than under tariff item 950 may not subsenquently be reclassified and entered under tariff item 950.

10. Goods imported or taken out of warehouse on and after 18th January, 1965 may not be entered under the Automotive Order in Council P.C. 1963-1/1544, dated 22nd October, 1963, which has been superseded by the Motor Vehicles Tariff Order 1965.

11. The vehicle producers listed in Appendix 1 have submitted the required declaration and are considered to be manufacturers within the meaning of tariff item 950. As other manufacturers submit the declaration, their names will be announced.

12. Importers are required to file amending entries periodically in respect of parts, and accessories and parts thereof entered under tariff item 950 which are subsequently transferred from original equipment to repair or replacement use.

13. In respect of goods qualifying for entry under tariff item 950, taxes imposed under the Excise Tax Act, when applicable, are to be computed on the value for duty, that is, the value for Customs entry purposes, as in the case of other free goods.

Raymond C. Leberge
Deputy Minister of National Revenue,
Customs and Excise.

APPENDIX D

TABLE D-1

PASSENGER CAR IMPORTS BY VALUE ($'000)

Year	Total Car Imports	Annual % Change	Car Imports From U.S.	Proportion of U.S. Car Imports by Value
1960	213,648		63,540	29.7
1961	154,336	-27.8	47,953	31.1
1962	151,245	-2.0	54,314	35.9
1963	92,935	-38.6	28,636	30.8
1964	138,729	49.3	44,294	31.9
1965	238,381	71.8	125,432	52.6

Year	Imports From U.K.	Imports From W. Germany	Imports From France	Imports From Sweden	Imports From Japan
1960	104,728	32,700	9,271	2,026	-
1961	60,944	34,808	7,412	2,668	-
1962	53,088	35,171	4,947	2,917	-
1963	22,044	33,376	3,405	4,816	-
1964	45,579	38,114	5,375	3,629	1,153
1965	45,328	44,073	9,598	4,652	7,873

Source: Canada, Dominion Bureau of Statistics, Trade of Canada: Imports by Commodities (Ottawa: Queen's Printer).

TABLE D-2

COMMERCIAL VEHICLE IMPORTS BY VALUE ($'000)

Year	Total Imports	Annual % Change	Imports From U.S.	Proportion of U.S. Imports in Total
1960	33,802			
1961	29,161	-13.7	23,329	80.0
1962	27,709	-5.0	23,860	86.1
1963	23,714	-14.4	20,737	87.4
1964	25,047	5.6	22,900	91.4
1965	47,108	88.1	45,030	95.6

Year	Imports From U.K.	Imports From W. Germany	Imports From France	Imports From Sweden	Imports From Japan
1960	3,913	2,700	314	23	-
1961	3,205	2,229	171	152	-
1962	1,786	1,729	108	101	-
1963	922	1,835	69	75	-
1964	550	1,217	97	18	249
1965	765	566	47	0	662[a]

Note: [a]Obvious compilation mistake in the value for duty of a bus imported from Japan in 1965 is corrected here.

Source: Canada, Dominion Bureau of Statistics, Trade of Canada: Imports by Commodities (Ottawa: Queen's Printer).

TABLE D-3

TOTAL MOTOR VEHICLE EXPORTS BY VALUE ($'000)

Year	Total Cars and Chassis Class 58019	Total Trucks and Chassis Classes 58031 58039 58095	Total Vehicle Exports	Annual % Change in Total Vehicle Exports
1963	28,080	9,070	37,110	-
1964	67,665	13,998	81,663	120.1
1965	148,643	32,054	80,697	121.3

Source: As per Table D-4

TABLE D-4

PERCENTAGE OF TOTAL MOTOR VEHICLE EXPORTS TO U.S

Year	Total Cars and Chassis Class 58019	Total Trucks and Chassis Classes 58031 58039 58095	Total Vehicle Exports	Annual % Change in Total Vehicle Exports
1963	2.3	34.0	10.3	-
1964	30.8	36.6	31.8	208.7
1965	44.5	72.2	49.5	55.7

Sources: Canada, Dominion Bureau of Statistics, Trade of Canada: Exports by Commodities (Ottawa: Queen's Printer); and Motor Vehicle Manufacturers' Association, Facts and Figures of the Automotive Industry (Toronto).

TABLE D-5

TOTAL AUTOMOTIVE PARTS EXPORTS BY VALUE ($'000)

	Asbestos Brake Linings and Clutch Facings	Motor Vehicle Engines and Parts	Tires and Tubes	Spark Plugs	Total Automotive Parts
Class	47440	58085 58099	62005 62009 62025	68095	
1963	362	49,651	7,529	2,090	59,632
1964	374	95,245	7,312	2,319	105,250
1965	560	172,802	6,441	1,845	181,648

Source: As per Table D-6

TABLE D-6

PERCENTAGE OF TOTAL AUTOMOTIVE EXPORTS TO U.S.

	Asbestos Brake Linings and Clutch Facings	Motor Vehicle Engines and Parts	Tires and Tubes	Spark Plugs	Total Automotive Parts
Class	47440	58085 58099	62005 62009 62025	68095	
1963	7.7	64.5	56.6	0.2	61.0
1964	6.7	73.8	40.6	0.1	70.0
1965	22.3	81.5	32.9	3.7	78.7

Sources: Canada, Dominion Bureau of Statistics, Trade of Canada: Exports by Commodities (Ottawa: Queen's Printer); and, Motor Vehicle Manufacturers Association, Facts and Figures of the Automotive Industry (Toronto).

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